Images: Up Down Right Left back front (+Y, -Y, +X, -X, +Z, -Z)

# 1:12pm 16/10/23

Changed colour of hearts to bluey purple,

You gotta open the above file location as administrator and replace the original with one of the same name. I changed the original heart.png to heart0.png for safe keeping. This is advisable in general: keep a copy.

...it didn't work...

The default heart texture is probably being overwritten by another mod. Didn't really look, but haven't found another mod that overwrites heart... unless it's stamina...Changed stamina bread bar fine.

Made another version of heart. Noticed that the hud heart is actually different to default heart so there IS another mod overwriting it, or taking higher priority, rather.

A basic method to find it is to search init files for mention of the .png file but that is time consuming. Otherwise check the textures that are included in each mod. A more ideal file structure would be to collect all the textures in one folder and rename them so that their original locations are apparent immediately. If you thought checking init files was time consuming then this is a a full monty of ennui. Collecting them together alone would take about 20 minutes. It's an option.

Changed basic bed handhelditem color to blue, but concerned that the texture expanded. It didn't.

But I've another to check.

changed all bed textures to blue from red. Some irregularities. colors match, but some spill over wood texture.

3:07pm Added blue flame texture. The basic flame init file wont open under notepad, so use mousepad. Notice flint and steel can be cloned into flint and some other ingot: copper, mithril... to produce the blue flame.

require: fire:flint\_and\_mithril require: fire\_flint\_mithril.png

And to change the flint and steel texture to a blue ingot. The png is done. Let's check. No, there's more 'in it'. Something to do later is to set up the spreading of ... wait I'll hit it now. No. Here'S one: have a small chance that a blue flame turns into a basic flame. It's the last section of fire/init.lua. I need to change the flammability of neighbouring nodes of a blue flame to not being flammable because it's like, a magic flame. But I'll have that if a regular flame is near a blue one the blue one can turn regular. Made blue flame not buildable to or floodable, weak damage (1), and walkable. Flammability some other time. Checked and should have put moreores:mithril\_ingot instead of default:mithril\_ingot. Should it be made a default item? Also changing it to not walkable. That would mean I can walk into it, but not on it.

4pm: creating a new default tin block top image for the default folder. Splicing from default tin block worked.

4:30: Added color blue to xdecor's curtain range.

4:56 I'm just doing some textures for the blacklight idea.

It would be nice to set that a flint\_and\_mithril sets a real\_torch:torch to blacklight. Blacklight traditionally is said to be created on activating a cloud block with a spent mese torch. current blacklight in use has not got any light effects. This is the blacklight that the first method here, using a flint and mithril on a realtorch, should do. Then when picked maybe it's just a normal real torch. But if crafted such that the flint and mithril is sacrificed, it becomes a blacklight.

5:28 added blacklight to crafting registry in real torch init.lua.

set real\_torch:blacklight instead of default:blacklight

All this blacklight stuff should really go in realtorch folder but elements of the torch+s operation are bunched together in default for clarity. Since I'm only experimenting I'll opt for security and put it in realtorch for now. Mese torch should be timed, manageably. :). Accidental text writeover instead of insert did not last through a restart. Seems the bottom left corner buttons did

it. .. Smoke staff will eliminate a cloud when projectile strikes...Cloud goes in misc. Texture already there. Cloud already registered in default/nodes.lua. Since cloud is registered in default, it is available in creative without mods. When mobs monsters is included, the crafting method of cobew, water bucket, and permanent flame works to create it. Misc is for recipies, I believe. I'm making a 'spent mese torch' to avoid ambiguity. Setting obsidian shard crafts with mese post light to make the spent mese torch. Textures added to default. Some of it is still going to be in realtorch folder I think. No it's in 'blacklight as yet unplaced. I'll put spent mese torch in real torch folder. Added spent mese torch recipe to real torch. I think there's a need for item registry too. SMT should be placeable all the same. Got error on adding blacklight items to realtorch init: Global 'S' wrong. Taking it back out so. blacklight should be it's own (heavily based on real torch or mese post lamp) thing. Maybe make mese post lamp like that so can add timer (model it on real torch).

7:24am 17/oct/2023 Filling vessel shelves with cooked clay bowls and trying to make the vessel shelves automatically compatible instead of having to switch out an item already on the shelf each time. Went to mods/vessels in the usr/ route. Want to make bread plantlike: maybe it will be placeable. On line 42 of farming mods init added plantlike type but didn't edit any other aspects in the register craft item such as a plant item might have, yet.Added ground content false and walkable false. Testing before copying bottle's selection box. Doesn't place yet, going to add selection box.

7:45am 18/10/23 could take all day, but I'm upping the resolution of the tv, then stitching a 16 fold collage of scenes from the game for the presentation. Security style, in some slightly higher resolution. So first things first, up the resolution see if that works.

Actually a quicker thing for now is to use the pngs from another texture pack: rgbalt to make a kind of informative display. No the easiest thing now is to take 16 good security oriented surveillance snapshots and form something like 64x64 pngs in one folder.ETA 30 mins.

8:39am 16 shots taken. Next is to bring each down to 64x res. Hacыщaть = saturate

10am tv 16x256 texture done. It's low res but authentic as it gets. Worked. Hard to read as identifyable locations, so 64res is better. Best to change the texture of another non animated item first, see if it works.

10:23am Making original tv same, but it's the one on the beach, and the 16x256 one renamed 'security feed' and have to change the crafting recipe. obsidian glass instead of normal glass. Craft registered. both versions added to nodes. Security booth tv reverted to original but if a security feed is crafted it can replace it. Done. 10:33am

2:11pm Notice tv only has four scenes and they are each twice as long...changed animation frame duration from 160 to 40. The simple beds have a bottom part that should be rotated 90 degrees clockwise. The edges are a bit rough still, maybe match them? Done, but fancy bed has color spill onto wood. Sorted.3:12pm the sec tv still has an oddity, it displays 24 scenes in stead of 16. Fixed on changing animation duration, or 'length' to 60. Odd. 8 scenes length 80. 24 scenes length 40. 16 scenes length 60. Is that right?

Increased resolution to 56x44 for the 16 security feeds. Should I remove crafting recipe for it?\_

5:09pm Silenced privelege function in privilege.lua of element portals, but owner name still appears when Noah King visits Wonder portal, then when clicks, crashes. reverted. Could be form.lua. following revert (adding privilege section back to privilege) still has some problem so going to re-unpack the mods I have to double check. Using Ctrl+z it's gone back to normal.

4pm 19thoct I remember there being a portal folder for each player, so I can just add them manually each time I add a new Character. It's in the world folder.Copied list and replaced name, still shows as fws, cut fw's privilege data, reloaded world.

4:19pm Changed some keycodes: Mod[7] is the at symbol, Shift period is multiply, Shift comma is comma. Mod[7] was 'approximate' but it can be approximated by tilda, which is at ... hmm.

Using the multiply 'x' symbol doesn't seem to work in python. tilda is at Mod[.] 12:59pm23.0ct.23 Added some simple logical dirt cooking recipies. Cooking makes

everything drier.

List of all commands: peaceful\_player, shout, fly, password, creative, bring, kick, teleport, ban, noclip, debug, server, privs, fast, basic\_privs, rollback, give, protection\_bypass, home, settime, interact

List of default commands: server, shout, privs, password, basic\_privs, debug, kick, interact, ban

Does one of these commands enable the zoom function (pressing 'Y' button)? Yes, creative. Can one make zoom available in... hmm, maybe just use a binoculars. 6am 240CT2023 Have alternate longer texture for firefly\_in\_a\_bottle. Want to remove white background to set as animation. Finding it very hard, because it's in chinese, search doesn't apply to the program tools just contents, and functions I tried to apply to selections just applied to selections and not the objects being selected. After selection something, 'move' glooses the selection box over without changing the image. Checking if Pinta opens backgroundless firefly\_in\_a\_bottle animation image already there. Can either settle on altered fiab animation, remove background or paste carefully from the new texture to an identical or extended fiab animation.

24thOct 2:54pm I think bread ingredient seeds should be bottled, maybe there's a third full, 2 thirds full, then full, in whatever color the seeds are. Also I should be able to make cereal with seeds using the mortar and pestle.

1:20pm 26thOct Computer didn't operate beyond boot menu likely due to 8GB SD Vard that was connected during boot being recieved as perhaps a bootable drive. Once I removed it× the laptop turned on normally.

27/oct 3:13pm for the nssm:bloco redreport go search in default entity registries for it and take it out. I do now.

29/oct 3:36am Not sure which mod overrides default empty glass bottle texture. Odd, I worked with it before. 6:30am Colored vessels\_glass\_bottle white for milk bottle, but would rather the long cylindrical one. Added before, a regcraft for bottle milk, in cow.lua of animal mods.Just the same recipe as for glasses of milk. Bottles that can be placed at doors, like the big empty glass. But I can't seem to find (Using search in both mod folders) the big bottle.Not in textures, but it might have another name and be easier to find looking for placeable objects, which all have meshes. Here's what to do, there's a texture in wisps: the empty wisp jar, use that. Nobody stores milk in open glasses, where's the sense in that? So... I have to find the location in files of the bottle texture I was working with earlier this week, then it should be straightforward adding that texture to a drinkable and placeable milk. I have only found this bottle texture in rgbalt, but I'm not even using the texture, I've removed the rgbalt folder and put it on the desktop...

Actually, for now, I'm just using one of those round bottles that won't stand up right if t'were to be placed outside. Milk's alittle off color, but hey, those cows are attracted to the meat tree from voidspace. Regcrafted bottle of milk in cow.lua. Gotta check if the things I named that are there already are correctly named, and remember to add the others before I finish. First up is usr/../vessels/init, the bottle is nodereged with a selection box, then craft registered to get ten from five glass blocks. This would correspond with gameplay except that the vesselsglassbottle png referred to in the nodereg is the old round type. The plantlike is half out from the middle and reaches the bottom of an empty cubic unit bu only 3/5 up. We have bottle of milk! I'm going to make it so that 7 tin ingots in a U shape make a standard bucket. Realise I mixed the recipies in misc (where random new recipies without new textures or mechanics should go) for cooking dirt dry. Cooked a dirt into dirt with snow, and noticed another mistake in there. Fixed. Bucket done. Both in Misc, wonder should I put the milk bottle in misc too... No, because I had to make a new texture for it. Then you can't use direct reference to the jpg, the jpg has to go in the misc folder too. I like it as it is, I have to say. Or... do I?

7:30pm 29thOct, looking at adding an 'override' section to empty cauldron in fire/init.lua so it ignites the air above it whech lit. Error (Pictures/截图\_2023-10-29\_19-40-21) seems xdecor:cauldron\_empty doesn't exist. Removed it. 9pm: used worldedit. Burning barrel outside Night club.

8:40am 30/oct should make paper writeable some way similar to the book/ but just one page.

1pm Have been adding beds to third town from the hole. The one with portal to Tunneler's Abyss, and Dr Frank Oyrost. Should rotate the texture for steel bar trapdoor. fire:blue\_permanent\_flame

5:50am 310CT23 yesterday threw some bunk beds in TJ, that's 2 and 3 piles of standard bed 1×2×1/2 blocks, occupying 1×2×2 or 1×2×3 aligned and most with a ladder, some with seating underneath, placed so the pillow is near a window, observing the rule to have a character sleep facing something positive like a fireplace, entrance flow, calming structure, rather than a wall, unstable events, darkspace, movement flow. It's a ballancing act getting those priorities right. A 1×16×16(8 at top) wood panel, props at either end if exposed without other support, so one adjusts for two or three unusable nodes. I have made a bunch of rules, and broken nearly all of them. 7:12am No load. socket port use fail. Game was slowing to a freeze 3 or 4 minutes into last log off. [Pictures/

截图\_2023-10-31\_07-14-47] Ah, game was open in another window 9pm mt blcks out while piking second rail. 10:30pm rail through wonder done. 8pm 3/oct new recipe for binoculars using bottles and glasses with brass and a gear in the middle for the twisty adjuster.

3:12am 4thNov Maybe copper armor? Armor wasn't default.

5pm Cotton Clothes. Installed Newspaper mod but doesn't seem to do anything. Noticed you can copy books easily in the crafting table the natural way. Anyway have to find an armor regcraft... 6pm Added cotton cloth textures. Got started with CottonInsert.txt, just a copy of wooden armor, but I have to set a new armor\_type\_cotton somewhere. Perhaps in The defaults. No rush I guess. 7.14pm settingtypes.txt cotton added, and might try more later. Pasted the cotton section into armor.lua Doesn't look like it worked though... And why would it? I didn't refer to the undeveloped texture maps yet.

5:23am 5/11 Since much of armor functions are grouped, I should change name of cotton clohting to match general descriptions of other metal armor types, in case those names are being called by functions only in that form. Didn't work....

4:09pm08/11 (penny's Birthday). used mobile's vpn to download the tj with gyroid structure (Escape) and Tetra cell ship (Desert). Many fails reaching, moving, unpacking, but ultimately a straightforward operation and it has loaded for play. The compressed file must be renamed to reflect its file type, in my case, .tar, to decompress. The tar compress didn't change the file size much, but the .gz one after that near halved it. I juggled it and duplicated it often getting it to fully transport. Now there is the problem of combining it with the administrated Sim4 population, housed in every other village, and the new rails, living old prison road, and tunnel security base. I could manually shift it in ordered cells, the easiest way, from the recent import, labelled E, for ESCAPE, to the one I've been playing with these days, labelled S, for SIMS. This would be given 2 days, and it is work. What about moving the avatars and roads instead?. Much faster, and same deal. But all the beds as well, and it feels counter-intuitive doing that. I'll probably do something or another, but I've already been watching some classic and popular movie segments, which are still great to think about. If I think the Laptop can manage it, maybe with the ice cooler underneath, I'll go with E->S, it's 25 cells at the top, that is, 1000 units over the origin, and like a tree form to dissect over the desert, with pod-like pairs to match. Bit more fun moving that stuff, greater challenge than checking rooms, harder to miss things. How can you miss things like that?! 9:05am 9thNov'23 Had Breakfast, ready for action. I suppose I'll see how big an area I can shift.

For S, it's about 120,80,120 in xyz volume, so let's simply divide it up into... 20s? it's still 36x4=144 vols. Bit much. If I can get 40s it's an eighth of that, and 18 is manageable, but 64000 is nearly too many... Anyway, whenever I pack a chunk I'll name it the coordinates it should be placed, and its cube's side length, like: -68.32.-68.36x3 so I'll know to put the first marker at (-68,32,-68), and it'll fill 36^3=46656 unit vols. I must remind myself that mistakes can lead to having to delete areas and redo, and watch out for overwriting previous saves so note the coordinates carefully....9:38am got the warning it could affect about 70000 nodes but it actually saved about 1500. I could go bigger than 41³. Going from TJWIDE to TJWIDE1. I'm just going to transfer the schem for each and load each to get the quick result. Enabled

Worldedit in both and copied the schem file -67.13.-70.41.we over. Odd, the first marker is being put a bit higher than I recall it being taken from. Double check? No, it's in the right place. It's my character height. Also note, the bridge will be affected. Probably some of it will be knocked down by the approaching Tetracell (T). Loaded easy that first one, next I'll go all the way bottom to top, but first, the rest of this column, starting at -67.53.-70. Exactly the thing you have to look out for, as far as the desert town is concerned, the little villagers, is the chunk boundaries mustn't intersect the path junctions, for at the centre of each is a lava portal. That's just what happened here, all the LPs are at some subspace generated by {(-39,27,-28),(-79,43,-28)...} and each point has a region where you go down 3 and out 3 if you're gonna cut it. I don't know how right those coordinates are. 215730/6373 effect/save. Loaded fast. I think there might be ten or eleven more of these. -72.12.-25.-17.93.19 loaded. 10:21am.329448/7030 e/s. Regrettably, some couple of edge blocks were clipped here and there. Right the west edge is handled.365976/11498, for -26.15.-72.65.92.-22.we. 246000/7270, -16.13.-23.60.92.16. should start 1 pace to the -x. clipped a slice: 33 nodes accidentally saved but it is still ok, I'll overwrite them with the proper slice in the proper TJ. Accidentally saved the empty space in the function's range, instead of domain (E). Desert Tetrecell's in.

Break then on to Escape.11:30am

11:56am giving origin local beds names: Paradoc McRoot [-3,-1,-6], Bartok Elyengrad [-1,-4,+-7], Post [2,0,-5], Len Ralek [-4,-6,-3], Afterclass [-6,1,-1], Huzie Marioc [-5,4,-5], Gil Finks [-2,+-7,4], Wintus McSopal [6,4,0]... (It should be the curtain has three settings, closed, half open and open, with you can't have closed and open ones connected vertically without at least one intermediate half open one, such is as openable as they come. The open texture would just be two sundles either side and rather vertical. A light change would just make the texture possible without the continuity restriction.) ...Fardo Crodel [1,4,-4], Animei Worphada [2,5,+-7], The Wai Fu Bar [5,-1,-4], Papacad Acefox [-3,-3,0], Kita Nengu [6,-4,-3], Lixa Poli [5,+-7,-1], Temor Byabi [-6,-2,2], Alkap Sito [-4,+-7,3], Emmy Gray [-2,3,0], Sevalu Anu [6,5,2], Aetrin Tanger [3,-5,1], Zoze Simido [3,-3,1], Sumali Kuda [2,-3,3]. That's 13+8=21 avatar beds named. I check a cell for board examinations (are the boards in the cells- those coords are for the beds, in rooms, with boards by the doors or visible through a door window. Not Spallet Yenu in Port room. Donna O'Maricha [4,2,-5]. OK here's the problem, make the cell not cut any beds. I'll refine the coords so that they contain the base (and top) of each bed, and the cell boundary must contain both for each bed, and not intersect a neighbourhood of 2 about and 3 below the origin... Since the names correspond with beds, I'll list them again for convenience, without names. There should be 18. There's actually 19 counting Donna.

farming:bread\_multigrain
vessels:glass\_bottle

{[2,6,7»8] [... see home/s/.minetest/Escape Beds.txt

2:30 halfway through this. 3pm listed bed coords. defined a sum of individual coordinate and reordered the list, so it sort of goes up a long diagonal of the cell. So just looking for 3 faces xy, yz, and xz that don't cut a bed. Cell chosen, Alkap Sito re-boarded. Ok, I think it's ready for gridlock baby. Just going to expand it one unit each direction for easy marking. It was a 5x5x4 that became a 5x5x5 of cells before but I'll do doubles or quad or octos if Ican to bring it down to 15 to 30. There was no board for Aetrin Tanger. Th peripheral boards are so far nameless, but for White Bar, Afterwork, Freeze Post, and Fire Herald. Can't decide whether to stock the shelves or not... good to have an empty book around, or apples.

20447nodes saved in 8cell block. only about 13 to 5x5x5 like before. 6:22pm Just gotta remember to jump by 28s from previous points. Got 7x7x2 by accidentally mistaking a 2x2x3 for a 2x2x2. loaded 25 cell square.

7:24pm played around. nearly destroyed stuff, good thing I noticed the lava drop in time. THere's also a three in a row lava at a cell edge.7:43pm 5x5x5 done. It's good enough.

Only took about 10 minutes with the schems: Middle one special, middle one standard, 5x5 standard. Not even middle one standard. Just two schems. '-7.993.-9.7.1007.5' and '25'.

That and emptying the lava trio, resetting the portal by editing the txt file in the world folder. Oh, 'borrowed about 12400 apples, brown bread, about 8000 books, glasses. For 400 pop. Is that right, no! 2000 rooms, bit broke at the edge. Next would be to make a clean edge for each cell face, 6 of em. Something a bit Babel, some kind of naturalistic proposal, perhaps inpenetrable without mining out, with curving classic rockface edge maybe, or a pool underneath, .. It's meant as an infinite structure isn't it? But when you know that it's heavy on the rendering you wonder if it would be better to have it classicly possible. Maybe even throw in some columns to the bottom. HA! But why would that ever be the case?It's meant to be another dimension entirely, and if anyone asks, that's what it is, so newcomers aren't to know all about the origin and coordinates and all that.

7:12am 10-Nov. Have been writing Oct instead of Nov. Fixed. The sun is not moving in the sky, check day durations. Just activated timespeed mod, works again. On T, it would be great if the portals were on a seperate network, and transported player at random and automatically, so you have to avoid walking on them. But it's really good, in fairness, that they're only one way to the other four, and invisible otherwise. That's because they are clones. Though the Escape clones don't work the same, I don't know why. Yeah, if the portals were one of two colors, that changed at random or at different rates, and if it's active, then you're sent to another random one, so you've to watch ahead if you want to avoid that.

1:26pm Can change perms on someones land, they can let you build on it etc. OCody dropped some books my way: coords. like floatingpoint.
6:11pm Another recipe for mortle and pester. Done. Now to reverse the recipe: put the m+p on the crafting table and output is magicalities:wand\_core while xdecor:bowl remains. Examine milk bucket. Done. 6:43pm.Also 6 pairs of sticks makes a wooden door. 6:57pm copied Nest or Niche? to Tunneler's Abyss.
9:30 done up Trainfan's.

--ronac

Porto Roma, Dictatorship spoiled construction, economy halts, leader kurtje99 rarely online. Shown port by andreicon and with MineTester. x,z 20000, 560.

Trainfan's home 19759,9,339 Made dirt roof. Fun.

- - -

23rdNov23 Ripyee goes hunting, back on Dec 10th.

List of Jangle Books inventory: Lost Endearus by Nicole Bortiet The Mountain by Sir Jack Calexer The Anon's Way by Pa Brown In Quitting by Kimberly Cajox Were-Things by Philip Chalkfrost Binary Tree by Walter Crawford Every Day is Like Every Other by Theresa Boydurst Arundiz Mon by Mr Burke Nest or Niche? by Noah King Colorways by Martin A Dark Tower I by Law H Price A Dark Tower II by Sarah Lyons The Tree of Puzzles by Rachel Frosts The Puzzle of Three by Gary Bon What do you eat? by Ka Rustspade Usage of Tools I and II by Sean Shaw Usage of Tools III by Stifanae Firewalker Folding a bit by Kevin Moore To Give up my Dream by Howard Fisher End Over Rule by Doris Johales If it Moves Like Us, is it Life? by Gary Bon

(c@#111)Visit Jangle Books on Quaternion Street X Facepalm Street on the Xarge Marshes Peninsula, just east of Spawn Mountains.

```
#(c@#111)
#(c@#111)Dozens of rare classics from the isolated desert mining town of Tinny
Jangle, and beyond! Puzzle over the magical poetry of a bygone age.
#(c@#111)
#(c@#111)We have the SANE octology,
#(c@#111)'One Pair of Electrics' and 'Isoma and Hazma', of course, but more
importantly the sprouts and sprawls of fallout shelter and sims originants,
known to travel widely between worlds, leaving such works as 'A Dark Tower', and
'Usage of Tools'. Complete list below.
#(c@#111)Lost Endearus by Nicole Bortiet
#(c@#111)The Mountain by Sir Jack Calexer
#(c@#111)The Anon's Way by Pa Brown
#(c@#111)In Quitting by Kimberly Cajox
#(c@#111)Were-Things by Philip Chalkfrost
#(c@#111)Binary Tree by Walter Crawford
#(c@#111)Every Day is Like Every Other by Theresa Boydurst
#(c@#111)Arundiz Mon by Mr Burke
#(c@#111)Nest or Niche? by Noah King
#(c@#111)Colorways by Martin
#(c@#111)A Dark Tower I by Law H Price
#(c@#111)A Dark Tower II by Sarah Lyons
#(c@#111)The Tree of Puzzles by Rachel Frosts
#(c@#111)The Puzzle of Three by Gary Bon
#(c@#111)What do you eat? by Ka Rustspade
#(c@#111)Usage of Tools I and II by Sean Shaw
#(c@#111)Usage of Tools III by Stifanae Firewalker
#(c@#111)Folding a bit by Kevin Moore
#(c@#111)To Give up my Dream by Howard Fisher
#(c@#111)End Over Rule by Doris Johales
#(c@#111)If it Moves Like Us, is it Life? by Gary Bon#(c@#ffffff)
```

## 7:35am 6th Dec 2023

Idea to slow player speed.

3pm A m4a sound clip 3 seconds long remains absent from output and the videos are downloaded from youtube to mobile all sideways, from before. path of TJ increases space req 80 percent run through kdenlive also.

#### 11:50am 16-12-23

mobs:hairball to be given new look. 11:55am reading GIMP tooltips. Finding palette. God it makes you feel so helpless to have words like 'paintbrush', 'Color Palette', to see the colors before you, be able to click on them, select the brush, open a blank 'canvas' of chosen dimensions, and then, with the paintbrush tool visibly a paint brush icon, to be clicking on the canvas, dragging it around and nothing happening to the page... I guess I have to use the higher functions. So I'm going to draw a circle in normal 'paint' since I obviously have no clear way of doing this in GIMP, then I'll open the ball in GIMP just to make the image round. Or I'll find another texture that is round. Maybe that would be easier. I'm turning hairball into pokeball, so that the kitten drops them like meowth drops coins with payday.

Ok, list the locations of mobs:hairball:

mods/mobs\_animal/kitten.lua l.101,149

Just there I guess. Just gonna replace it with default:gold\_lump... no, go back, it's so convenient to change the hairball as defined, then it's rather open, rather than mess with gold.

Looks like it isn't going to be simple saving a png redo of bubble.png from default, even saving to desktop won't do because it was edited without the admin code. Gotta take it out of default, a copy, >sigh< .... <puff>... and do it again. 12:36am. 12:47am done pokeball.png. lookin good. dropped it in mobs:animals texture folder. changed two words hairball to pokeball. Now hairball has at least the appearance of a grand classic pokeball. And the cat drops them.

1:03pm well now I'm just going to change all the inventory mob eggs etc to look like pokeballs with slightly different centres. ETA 30 minutes.

I just had the bright idea to change the 'meat' into another pokeball, but with a fainted pokemon in it. Hell, just change it into a standard one! No, a fainted one but you have to craft it with a revive crystal to get a standard one back. ETA: 1 hour. 1:13 gotta quickly edit pokeball.png to greyed out centre version.1:14 done. Need a list of groups etc. Should be in that lua doc, somewhere. Just copy group deets for bottle or something. A plant. No, a bowl. 1:30pm do eggs have their own 'group'? I want fainted pokeball to be that group. For now, like ore. Can I do that? Note that drinking glass is registered as a NODE! I'm going to model the faint ball on the glass and see if it works. Might be able to place it. Done for Pumba, now to make it revivable.1:48pm Done.Warthog is down and up again. Commented out porkchop etc. So, professor,

There are 10 animals not including horse. Names should be changed. The ones I gave the pokemon party in Ruby. But what I like here is that the fainted pumba pokeball sits on the ground properly: it won't dissapparate like loot. So, the formula: Change the egg image to pokeball, add registered node for fainted, blue out meat, registercraft a revive. 9 pokemon ETA 30 mins. 1:55pm. Beka mesh didn't load. Have to change mesh. Changed mesh file name and kitten.lua to beka.lua but also have to change name in init.lua. Done, but they are pure bright neon colors. Change the textures too. Just the names.2:05pm done.Right. Beka and Swinepine restored. 2:14pm 2:24 added etoll. There are different color sheep, I'll see if I can have all the items have a colored middle in the ball instead of the wool backgrounds.

```
This is the bit of code: mobs:register_egg("mobs_animal:etoll_"..col[1], S("@1 etoll", col[2]), "wool_"..col[1]..".png^pokeball.png")
```

# Change to:

mobs:register\_egg("mobs\_animal:etoll\_"..col[1], S("@1 etoll", col[2]),
"wool\_"..col[1]..".png^pokeball.png")

You want to color the pokeballs. Not now. Later.

this is why the grass has been hurting us.

2:29pm Must remember to be careful when globally renaming short strings in case of unintended overflow into other substring occurrences. 4 done now, didn't give ratatta a cool name. Hmm, still has old item img. Feylo the feathered little tyke added but egg is neon. I'll just set it to a gold lump.2:55pm Sweet, a golden egg sits on the counter. Well floats a bit. Hang on. Ok nvm it floats.3:00pm

So we've Feylo the flyer, Swinepine the notorious, Etoll the fluff n puff, Beka the Persian Sidekick, and ratatta. Maybe make ratatta cedry, like imagine Cedric from HP got turned into a rat the way Pettigrew was in the books. Of course, Cedry is a Gyarados, really, and maybe some day the rattata will evolve too... Added Penta the Penguin. Don't know why revive didn't work. Ah, no alias there to link names. Done.3:16pm

Denopay the panda added. Graz the Moocow added, name of Blastoise. 3:35pm Start adding firefly to dropped fainted pokeball for all of them.

Ok, 10: penta, oreon, nina, graz, swinepine, feylo, etoll, denopay, cedry, beka. See how they run.3:49pm Didn't find nina's mesh. Didn't rename it.

[[You'd be underground throwing pokeballs at orbyugs and most of them are used up in failed attempts, and the only way to get the pokeballs are the cat beka gives them to you...]]

4:20pm have moved on to monsters, done spider as orbyug. Landguard as Slink. Invisible though... 4:51pm Sorted. Kroxon as mese monster. 8:18pm just been dossing around... hairball is how I would approach dice.

Do 6 textures to try to make a dice in different orientations, or settle with a flat thing that looks like a spinwheel, use math.random as in hairball formula

in mobs\_animal/beka.lua to randomise it, and have that all the different outcomes are the same item when picked up again.

I've two pokeballs, one is a node item the other a craft item, I wish to combine them so that I have a placeable item that when held can be opened to reveal a random item.

```
1)
minetest.register_craftitem(":mobs:pokeball", {
               description = S("Pokeball"),
                inventory_image = "pokeball.png",
               on_use = function(itemstack, user, pointed_thing)
                               local pos = user:get_pos()
                               local dir = user:get_look_dir()
                               local newpos = \{x = pos.x + dir.x, y = pos.y + dir.y + 1.5, z = pos.y + 1.5,
pos.z + dir.z}
                               local item = pokeball_items[math.random(1, #pokeball_items)]
                               if item ~= ""
                               and minetest.registered_items[item] then
                                               minetest.add_item(newpos, {name = item})
                               end
                               minetest.sound_play("default_place_node_hard", {
                                               pos = newpos,
                                               gain = 1.0,
                                               max_hear_distance = 5,
                               })
                               itemstack:take_item()
                               return itemstack
               end,
})
2)
minetest.register_node(":pokeball", {
                description = S("Pokeball"),
                drawtype = "plantlike",
                tiles = {"pokeballempty.png"},
                inventory_image = "pokeballempty.png",
               wield_image = "pokeballempty.png",
               paramtype = "light",
               is_ground_content = false,
               walkable = false,
               selection_box = {
                               type = "fixed",
                               fixed = \{-0.25, -0.3, -0.25, 0.25, 0.3, 0.25\}
               groups = {vessel = 1, dig_immediate = 3, attached_node = 1},
               sounds = default.node_sound_glass_defaults(),
})
COMBINED)
minetest.register_node(":pokeball", {
                description = S("Pokeball"),
                drawtype = "plantlike",
                tiles = {"pokeballempty.png"},
                inventory_image = "pokeballempty.png",
               wield_image = "pokeballempty.png",
```

```
paramtype = "light",
            is_ground_content = false,
            walkable = false,
            selection_box = {
                         type = "fixed",
                         fixed = \{-0.25, -0.3, -0.25, 0.25, 0.3, 0.25\}
            },
            groups = {vessel = 1, dig_immediate = 3, attached_node = 1},
            sounds = default.node_sound_glass_defaults(),
            on_use = function(itemstack, user, pointed_thing)
                         local pos = user:get_pos()
                         local dir = user:get_look_dir()
                         local newpos = \{x = pos.x + dir.x, y = pos.y + dir.y + 1.5, z = pos.y + 1.5,
pos.z + dir.z}
                         local item = pokeball_items[math.random(1, #pokeball_items)]
                         if item ~= ""
                         and minetest.registered_items[item] then
                                     minetest.add_item(newpos, {name = item})
                         end
                         minetest.sound_play("default_place_node_hard", {
                                     pos = newpos,
                                     gain = 1.0,
                                     max_hear_distance = 5,
                         })
                         itemstack:take_item()
                         return itemstack
            end,
})
OH YEAH.
4am 12-17
If all the pocket monsters carry hairball mechanics, dropping mystery item
pokeballs, I can have that they drop fainted pokemon pokeballs, and if they
faint themselves they also drop their own ones. So it's like they play pokemon
catching each other. Because the remaining monsters have this dark side. Or ONLY
the monsters. Ok.
So, modelling tree-monster Sudota on beka's hairball... Want to change name
denopay to demopay.
11:45am Should revert pokeball back to hair ball, try to restore it.
original pokeball items:
local pokeball_items = {
             "default:stick", "default:coal_lump", "default:dry_shrub", "flowers:rose",
             "mobs_animal:rat", "default:grass_1", "farming:seed_wheat", "dye:green",
"",
             "farming:seed_cotton", "default:flint", "default:sapling", "dye:white",
11 11
             "default:clay_lump", "default:paper", "default:dry_grass_1", "dye:red",
ш,
             "farming:string", "mobs:chicken_feather", "default:acacia_bush_sapling",
ш,
            "default:bush_sapling", "default:copper_lump", "default:iron_lump", "",
             "dye:black", "dye:brown", "default:obsidian_shard", "default:tin_lump"
}
New Items:
local pokeball_items = {
```

```
"mobs_animal:fainted_beka", "mobs:beka", "mobs_animal:fainted_feylo",
"mobs:feylo",
    "mobs_animal:fainted_graz", "mobs:graz", "mobs_animal:fainted_cedry",
"mobs:cedry", "mobs_animal:fainted_etoll",
    "mobs:etoll", "mobs_animal:fainted_swinepine", "mobs:swinepine",
"mobs_animal:fainted_oreon", "mobs:oreon",
    "mobs_animal:fainted_nina", "mobs:nina", "dmobs_animal:fainted_penta",
"mobs:penta", "mobs_animal:fainted_denopay",
    "mobs:denopay", "mobs_monster:fainted_orbyug", "mobs:orbyug",
"mobs_monster:fainted_slink", "mobs:slink", "mobs_monster:fainted_kroxon",
"default:mese_crystal_fragment"
}
```

That's for beka. Maybe sudota got the other bits and bobs. Beka is a well trained Meowth. Actually cat is perfect isn't it? Right click is just like throwing a pokeball, it sometimes misses, but otherwise the mob goes into the pokeball and into your inventory.

So, just set that for all pokemon, and forget about Sudota's mystery drops. Probably drugs and other sanctioned contraband anyway. That's right, remove the hairball mechanic from sudota.lua.

Overwrite and insert can be toggled in the bottom right of notepadqq 12:42pm 2:06pm dirt\_monster is Grack, stone\_monster is konix. 2:54pm Water flan is Jel, Lava Flan is Reo. Obsidian Flan is Movoid. 3:17pm Updated kroxon. Should change all instances of 'monster' to 'munster' ETA 20min though. Half through changing drop chances of all fainted pokeballs to 1/2, and more importantly, max and min to 1. 4:25pm 2:30pm 18th

And Veiko will make 24. I'll stop there, magic number in MTJ. But in the all-granted HPO list, there's no faint ball for veiko. Some of the names are lower case initials. ETA:10mins..

Names fixd.2:45

To initialise Veiko as an 'animal' with the others.. All pokeballs look ok with right colors and everything. 3:16pm But Bodharo is neon. fixed 3:19pm. Balls output fine, all 24. 3:34am Next would be to catch em with right click, just have to decypher beka's taming mechanic...

8:49am Added the 19 of Escape, bringing Jangletons.xlsx list to 449. But where is

Spallet Yenu? Puttin him in anyway, that's 450.

9:37 Just spinning the wheels a bit, like how it runs with the 'nest' above ft's bunker.

10:06am... 11:01am put a cushion in the Free e-z e-post room for Spallet Yenu, Temor Byabi, and under the big black arch for mice. Any other half-beds are just for mice. I mean, cedrys.

2:22pm bowl of milk for cat. do regnode in beka.lua for bowl with milk, add milk texture to farming bowl or xdecor bowl, add it as one of the items beka follows. Then crafting recipe for any other milk containing item in conjunction with an empty bowl gives the bowl of milk as output and corresponding empty vessel in crafting table. Then examine how the cow removes a grass node, and see if you can make a cat be attracted to the bowl of milk when placed and change it to an empty bowl. You will have to register another empty bowl as placable plant-type node, or redefine an original bowl so that it can be placed. First, make bottle of milk, glass of milk, and bucket of milk items that the cats follow. Also want bowl of water placeable. Perhaps do the regnodes in misc.

Maybe nodes and items aren't mutually exclusive, so you can just define a placeable node for any item that exists. I'll check this by registering a placeable empty bowl in misc/init.lua.

```
minetest.register_craft({
    output = ":misc:bowl_of_milk",
    recipe = {{"xdecor:bowl", "xdecor:bowl"},
    {"xdecor:bowl", "xdecor:bowl"},
```

```
{"mobs:glass_milk"}},
      replacements = {{"mobs:glass_milk","vessels:drinking_glass"}}
})
minetest.register_craft({
      output = ":misc:bowl_of_milk 4",
      recipe = {{"xdecor:bowl", "xdecor:bowl"},
      {"xdecor:bowl", "xdecor:bowl"},
      {"mobs:bottle_milk"}},
      replacements = {{"mobs:bottle_milk", "vessels:glass_bottle"}}
})
minetest.register_craft({
      output = ":misc:bowl_of_milk 4",
      recipe = {{"farming:bowl", "farming:bowl"},
{"farming:bowl", "farming:bowl"},
      {"mobs:bottle_milk"}},
      replacements = {{"mobs:bottle_milk","vessels:glass_bottle"}}
})
minetest.register_craft({
      output = ":misc:bowl_of_milk 4",
      recipe = {{"farming:bowl", "farming:bowl"},
      {"farming:bowl", "farming:bowl"},
      {"mobs:glass_milk"}},
      replacements = {{"mobs:glass_milk", "vessels:drinking_glass"}}
})
minetest.register_craft({
      output = "mobs:glass_milk",
      recipe = {{"misc:bowl_of_milk", "misc:bowl_of_milk"},
      {"misc:bowl_of_milk", "misc:bowl_of_milk"}, {"vessels:drinking_glass"}},
      replacements = {{"misc:bowl_of_milk","xdecor:bowl"}}
})
minetest.register_craft({
      output = "mobs:bottle_milk"
      recipe = {{"misc:bowl_of_milk", "misc:bowl_of_milk"},
      {"misc:bowl_of_milk", "misc:bowl_of_milk"},
      {"vessels:glass_bottle"}},
      replacements = {{"misc:bowl_of_milk","xdecor:bowl"}}
})
minetest.register_craft({
      output = "mobs:bucket_milk",
      recipe = {{"mobs:bottle_milk", "mobs:bottle_milk"},
      {"mobs:bottle_milk", "mobs:bottle_milk"},
      {"bucket:bucket_empty"}},
      replacements = {{"mobs:bottle_milk","vessels:glass_bottle"}}
})
minetest.register_craft({
      output = "mobs:bucket_milk",
      recipe = {{"mobs:glass_milk", "mobs:glass_milk"},
      {"mobs:glass_milk", "mobs:glass_milk"},
      {"bucket:bucket_empty"}},
      replacements = {{"mobs:glass_milk","vessels:drinking_glass"}}
})
so.. cat drinks from bottle only. I don't get it...4:54pm It's only a kitten.
When regging a new item I think you have to use a ':' before the name... I
dunno. It'S 5 O'clock, I'm off now. Wait, copied bowlofmilk from misc into graz
an added global 'S' in description and it works, and why wouldn't it? It's
```

practically the same as a bucket of milk, (gut 16 times less volume.) Now let'S see if the kitten drinks some... left click is drinking it myself. Right click should be feeding the cat. Uh oh, it's no longer placeable. But the one on the ground is still there. There must be a conflict due to right click, which was originally for placing/ being re applied to feeding. Changed replacement bowl to farming to match bowlofmilk appearance. I'll make a 'cosmetic' bowlofmilk, will I? Using xdecor texture? But how would I explain this to a newcomer? 'If you want to feed the cat give it a farming bowl, if you don't see the cat around leave one of these xdecor bowlsofmilk outside...' Then I can have the bowlofmilk decay into a placeable xdecor bowl over a set object lifetime, and perhaps after a rain it fills with water... that's a bit of work but just what TJangle needs, a bit of existential realism...

Dig into xdecor and add the placeable nodereg, using the farming bowl texture, then accompany it with an empty bowl, and a water bowl. It's a kind thing to do, and a bowl has many uses for the passing beggars.

Added 'bowl of free milk', but still can't place it. Added groups to be like the pokeball, didn't clash with farmingbowlofmilk. Not placeable yet. 5:36pm that's very strange, I'll just have it so that it can be fed directly to the cat like the other one. The one that IS still placed shall serve as a reminder that there's a wee mystery here. But you know, pet's sometimes prefer to be given things directly rather than them being impersonall left without their seeing them being placed.

6:36pm milk bowls farming and xdecor and glasses and bottles... milk can be poured between them. 6:44pm. You want to place bottles outside doors: it's the milkman delivery! You want to offer them Cat-people glasses of milk, you want to feed the kitten with a bowl, and be able to place a bowl on the ground for wild creatures.

Maybe a regged node shouldn't be foodlike... if it's just sitting there. Adding placeable bottle of milk, with a paper packaging.

```
minetest.register_craft({
      output = "mobs:bottle_milkman",
      recipe = {"mobs:bottle_milk", "default:paper"},
})
minetest.register_craft({
      output = "default:paper",
      recipe = {"mobs:bottle_milkman"}
      replacements = {"mobs:bottle_milkman", "mobs:bottle_milk"}
})
You will be able to remove packaging. Maybe forget about it being craftable,
fainted pokeball isn't.
minetest.register_craftitem(":mobs:bottle_milkman", {
      description = S("Milkman's Milk"),
      inventory_image = "mobs_bottle_milkman.png",
      on_use = minetest.item_eat(2, "vessels:glass_bottle"),
      groups = \{flammable = 3, vessel = 1, drink = 1\},
})
that did it! hurrah! Now to make the wrapper come off. 7:25pm
minetest.register_craft({
      output = "default:paper",
      recipe = {"mobs:bottle_milkman"},
      replacements = {"mobs:bottle_milkman", "mobs:bottle_milk"}
})
```

Didn't realise debug file is like, a million lines long. removed it and put it in documents folder. 7:54pm Can I do anything craftworthy with something that's only registered as a node? Does it need something more? Should I do an experiment first? But THIS is an experiment... I'll try to place the bowl of milk again, by rewriting the groups section in the regnode, maybe the food type clashes, then see if there's a problem with the crafting element. Removing

```
'food_milk = 1' from 'bowl of milk''s groups. 8:01pm Doesn't place, but there
must be a way to place it like the milkman's bottle. Hmm, adding the
regcraftitem below the regnode cancels out the placeability of it. Groups are
the same, it's a vessel. There was no Global 'S', added it now for another
check. No difference. Doesn't look like adding a recipe would make it easier -
the craftitem reg changed it. But if I do add a recipe, it would be just like
the bowl, except I succeeded in making a bunch of useful recipies for the bowls.
They just don't place anymore, and I'm sure that if there was no Craftitemreg
for the bowl, it would be like when I had just made it and placed it. But let's
see if I CAN make recipies for the milkman milk. 8:11pm. No? it's an 'invalid
recipe' error. So I must find the difference between this and the bowl. Bowl's
craftitemreg is in misc and ignores the nodereg groups in graz. There's also a
'stackability' and 'edibility' line. I'll add these for milkman milk. 8:16pm
There's also no Global call for the name in misc's cireg.
I am aware that any noderegged item can be placed with worldedit. I will
incidentally make an empty milkman bottle and a crafting recipe to remove the
wrapper from an empty one too. It occurs to me however that this approach is
time consuming with items that relate to so many others, and it seem better for
crafting to change categories of item entirely, so that details are not even
sought, and absurdities forgiven by dint of it, but one imagines a kind of
reality in combining things, and taking them apart, mixing them etc, it really
is a categorical exchange that gives the broadest scope for imagination, it's
not really an investigative... space? But it could be too. You think the debug
has everything? Nah, memory has it, and forgetting is oh so neccessary when
remembering is the game. Look at what I DO, I have bits and bobs in different
places for different reasons, like, to save moments where I had ideas, or to
imply connections far beyond material mundanities, but the mundanities are what
you must change if you care to see the historical manifestations of those
dreamlike ambitions that fit above the rest, in the soul of the place.
8:29pm So I can place but not craft, or craft and not place. Well, I know milk
goes stale when it's not collected, but maybe the milkman collects them when
they are stale and replaces them with fresh bottles when no one is looking. And
people empty out old bowls of feline food and wash them out and replace them
with fresh milk for goodness sake. But... Is there anything with a crafting
recipe that can be placed? And isn't the recipe that revives a pokeball liable
to effect the placeability of the fainted one, just like taking off the sticker
makes the milkman's bottle unplaceable? All I want is for you to be able to take
off the sticker so that it's a regular bottle of milk. Sometimes this is hard
anyway, because the sticker is so tightly glued with some kind of insane level
of stickiness, and the way you do it is by digging at it with your nails for
ages, and pouring hot water on it, and sometimes you have to be real careful to keep the sticker intact or it will come half off, so that the outer plasticky
bit is removed but the papery underside is matted in with hard glue that
sometimes never comes off, it just stays there, sticky even when the paper's
gone, making it a real nuisance. Well, I'm going to change this, for my people,
for my world, but most importantly, for me!
[applause]
8:36pm
But professor, what about sleep?
Ah yes... sleep.
minetest.register_craft({
      output = "mobs:bottle_milkman"
      recipe = {"mobs:bottle_milk", "default:paper"},
})
minetest.register_craftitem(":mobs:bottle_milkman", {
      description = S("Milkman Milk"),
      inventory_image = "mobs_bottle_milkman.png",
      stack_max = 6,
      groups = {vessel = 1, dig_immediate = 3, attached_node = 1},
})
minetest.register_craftitem(":mobs:bottle_milkman", {
```

```
description = ("Milkman Milk"),
    inventory_image = "mobs_bottle_milkman.png",
    stack_max = 6,
    on_use = minetest.item_eat(3, "mobs:bottle_milkman_empty"),
    groups = {food_milk = 1, flammable = 3, drink = 1},
})

minetest.register_craftitem(":mobs:bottle_milkman_empty", {
    description = ("Milkman Milk Empty"),
    inventory_image = "mobs_bottle_milkman_empty.png",
    stack_max = 6,
    groups = {vessel = 1, dig_immediate = 3, attached_node = 1},
})
all those out. milkman milk placeable. cosmetic item. Sure, you shouldn't take people's milk, think of what they might say!
Well, you can anyway. Empty milkman's milk collectible. Only at TJ.
```

The way with the milkmen is they only deliver fresh milk to doors that have empty milkman milk bottles outside them. Also 'Greedy guts, the pianoman is hoarding milkman milk bottles to himself. If you go after him, be careful of his wiggly waggly finger spell, which can turn an entire village into a dubstep rigmarole fantasmagorium with his lordy hoardy string court set.

10:36am No I have to do something... Maybe save TJ, and play with stripping the game to the engine.

11:52am how many levels of grass are there? 12:50pm 5. make each a seperate... levelled seed source item craftable with dirt and producing a level lower of whatever it is. Call it grass, call it buggy grass! maybe buggy grass can't be replanted because the bugs that are keeping it together scarper, much like an alien invaded city can't be built easily upon because the builders, teachers, doctors and writers have fled. Or...

3:00pm I have created wet dirt! dirt from dry dirt with bucket of water, and I still have the bucket after the operation. Now I want to make dirt with grass from grass seeds. Though, it takes time for grass to grow... Not as simple as just putting any seeds in dirt... oh my no, they have to be harvested from grass. Now in reality you can just go to grass and pick seeds without even disturbing the plant... but here, hehe, I'd be lucky to call myself personally responsible for creating a useless decoration block from scratch that serves to remind me that more is needed. But I know what I'm doing, trust me, it's in the grass you collect as well, but anyway, I have regcrafted a recipe that includes reference to grass of a particular level as ingredient and think that a particular level of grass might already exist as a node but it is neither placeable nor craftable, so it's not regnoded as such or regcrafted at all. Where could it be? Farming/nodes.lua?

..3:35pm Alright, where is the grass texture? default.

3:51pm I've decided to just use normal grass to get grass seed... destroying the grass in the process. I wonder if too much of that crack could long term cause a deterioration of grass's ability to grow REALLY big... I want really big grass, really big jungle grass.

Set dry\_grass\_5 to get grass seeds to make the grassondirt. Get dry grass to grow again. And spread. ETA:1 hour. Oh man never mind, like, I know it's right and all, but I just can't focus, I mean, we've had this damage inducing bug laden pock marked dry grass for as long as I can remember, and we have to meditate on it, why is it damaging to walk through? Is it bugs biting, or thorns poking? Is it radioactive, or are there small pokemon fights going on? If it spreads...

I don't want to begin a two step process, can you believe it? Seeds from dry\_grass\_5 and dirt\_with\_grass from dirt and seeds. Because then it's registering a craft item that I can't think of another use for... Feeding a feylo? Sure.

4:26pm wait, you can do anything with the dry grass. But just use regular grass for the seeds. HEALTHY grass. Maybe the buggy grass should be added to fire or cooked into green dust that makes green fire!!!! Brilliant! It should hurt, too, the fire.

model grass level 5 as pokeball, with mathrandom dictating number of grass seeds gleaned using list. No just TRY grass\_ with blank number.

No I just skipped it all and made it the easiest recipe in the world.

Look, you know how sometimes what you're holding looks like a bunch of x sized grass, or grass that has aged x amount, but actually it's all ages of grass mixed to together. So take any thickness of layer of that stuff and when you're crouched over the little crafting table to shake the grass over paper and dredging the sheet then under a thin top layer of wet dirt for placing, you'll notice that all grass thicknesses allow for regrowth... But really it's more a question of whether grass spreads naturally (by roots) regardless of how much a herd has trimmed it down.

5:39pm 5:49pm

7:03pm Added cartoon tv. Grass thing's done.

6:23pm added loads of poke switcheroos. some convert, some go random with blacklight. Pock added, with washing off of it, links with blacklight, and makes powder and orb, powder and bowl without function yet, blacklight unplaced. inokuin flips torch state depending on whether fainted or not, and interrevives with bodharo. Graz and grack co-evolve. Feylo evolves to Kroxon with mese block, and back to feylo state with ob shard.

About grass, remember to put grass through item frame to call the stage, and it crafts directly to seeds with pock dust by-product when stage is above 1. 7pm movoid revives with a blacklight, and it takes two, one fainted, to blacklight a standard pokeball out of it, with the unfainted movoid remaining on the crafting table. Try the same thing with a fainted bodharo and a movoid, and bodharo remains with movoid turned into a pokeball. by pokeball I mean the random pokemon generator. reo revives with lava bucket under ob shard, jel similarly but with water. water bucket under and coal powder above either of pocked bowl, pocked mortar and pestle, and pocked flint and steel leaves them as bowl, m+p and f+s resp. pocked powder is in a bottle, while the orb is cooked dust in a bottle, and the bottle smashed to free the orb. most of the pock items seem not to have a recipe- they are by-products. Bodharo follows player if holding a pokeball containing a monster or animal. beka becomes folinax and vice versa if crafted with obshard and mese crystal resp.

Very cold in here tonight. And the last few. been freezing like an idiot. shopping tomorrow. Typing skill increased anyway, as well as code reading. But have to study chinese tomorrow. 'least it's only wednesday. backuped. 7:46pm

21stdec 7:55pm set the pucky bottle AS the net that catches the firefly. mortar... pock powder make candle light green doesnt run out of bottle. pocky glass registered as node in default. 11:21am Haven't done those yet but have a good recipe for pocky candle implemented, and it's like the regular candle I copied, and a failed recipe that is quite good for pocky string using three strings, below that pock powder, and below that mortar and pestle, which is used for mashing the powder into the string. Hey, use bottle of water, or glass of water too. But get it to work first. 11:30am vessels:pocky\_bottle wasn't made yet. No, it was but is called pucky. You know, a lot of problems are of this simple misnaming type but let's not loose our saddles.

1:19pm Gotta... set all pokeball groups to catchable.

I want pockman to either get into a pock bottle, ignite a blacklight, or be turned into an empty pokeball. Got it to turn using pock powder held as tool. 2:31pm, want them candles to turn green, but only breifly, when pockpowder is pointed at them. 3:04pm set all the fainted pokeballs to pockable in groups but nothing happens. Not sure anyway. would be kinda better to have... a same description pockman node and different actual monsters whose fainted pokeball node it turns to with a dash of pock powder, but... Actually want catchable entities Entities don't have groups in their lua docs. Started stackin powder's ifs with beka, will do for first 12. Works better they switch.3:41pm Beka's got the pockmon links. all pockmon numbers (which you aren't supposed to see or care about, but which are basicall in alphabetical order anyway) are linked to their corresponding fainted balls with the deuce ball linking with the original pockmon. They all look the same. But the pockmons can have different

animations, maybe? Original pockmon takes a few tries for some reason, but the powder eventually switches him to a random pokeball.

5:20pm Try use blacklight as the 'net' for fireflies. 6:46pm I've noticed a few things, blacklight can be made four ways, and spent blacklight 2 ways. They are mostly original except maybe using flint and steel and pock is a bit too easy. Also there is a lack of local resources to change the lighting to accomodate blacklight's original spirit.

Without even a working duplicate of torch, I'm forced to abandon placing blacklight as a node, but not as a candle. However, it is based on a comment from this lore:

Head puts a cloud out and Samsun says 'That's bluefire fuzz!'. 'Correct, and bluefire mist is known to be the most difficult to move, even with a wand. Now I will demonstrate the method used by Gulibre to absorb it into a blacklight.' People were crowding around the classroom door, trying to catch a glimpse of the headmaster's magic.

A blacklight should be like a torch, with a flame. It should be held with a secure and careful arm, not daintily like a clown in a nightdress might hold a candle, for example. Why? Because the blacklight is a very special addition to the world we know, that seems, at least, to produce rays of darkness, however you might envision it.

It therefore, should be held at arms length, if at all.

But, if held on a brass candle frame, there will be an anti-shadow cone before your feet, assuming there is enough blacklight ray decay on the surface. So the blacklight candle is like a normal circular shadow that appears beneath an avatar's feet, but inverted in a bubble of outwardly decaying darkness, potentially unnoticeable in real darkness.

But you can see how this is a basic thing that should be observable. Thing is, what it looks like isn't a pockmon, but it's potentially invisible from a distance. In one interpretation, it's a region wherein an observer percieves a lack of light. But again it's not simply a shadowy mist, it includes ray reflections. How? The way real light is visible at a point as long as the point recieves an uninterrupted ray from the light source. This range of influence is felt with blacklight, but instead of lighting the surfaces making up its surroundings, it darkens them. Normally surfaces are bright enough in shadow to at least be seen, because of spectral radiance from neighbouring regions without shadow or with other light sources, but in the abscence of spectral radiations, which is often where one would put one's hat, we have the possibility of true darkness, at least in the abscence of even a point source of light. But in the prescence of a point source of light, and a blacklight, there is a conflict of ideas. It's a bit of a grey area.

3:53am Big Grass. :).

4:44am Knowing a random dice number is produced simply with math.random(1,6). Should make dice. Proper dice with the right faces in the right places... or, 6 little pixel cubes randomly placed on a surface and a floating number between 6 and 36 with the correct distribution, but not matching each time.

Torch has a combination of rigid body and animated flame, use this property. 4:46pm Took a break.

6:35pm Cool short torch added en route to adding dice, by changing selection box

8:06pm Added a sort of daily Dice, 0 to 15. Put it in the portal I take out. Grass walkability needs switching small to large. Great. Dry\_grass\_2 need to be bigger. Oh well.

8:34am 23/12/23

Want to use 'unknown node' visual type when registering mobs. 8:40am Changing spent real torch texture to match. 9:37am need the default non-mesh image to remain vertical. But can't find 'unknown node' either.

12:53pm Walked and ran with Halley.

5:18pm Added Strax, crafted with 5 pocky orbs, 2 lava orbs, blacklight and steel bottle in the middle. Very destructive. Want 6:19pm firestaff fireball to ... but defeating strax drops a strax.

## 26/12/23 1.05pm

4:18pm Find and replace actually undid a copypaste of yin to become an

additional yang, in demopay.

5:06pm Making flint and steel of the three types reversibly craftable. 5:09pm Done. Also added Pock Steel block and it's automatically slab and stairs compatible, but that's all. If I want the other variants I have to go on a bit more down the pock road. 5:45pm regged frax in veiko.lua. Yin and Yang found in Demopay's lua doc, and Strax in Bodharo's. frax modelled totally based on veiko, strax on movoid, and yin and yang on demopay. Frax crafted with yang over bowlofwater oyer yin. farming bowl. 4 bowls over water bucket. bowl of water in farming/food.lua.

Uploading online requires seperating altered docs from default etc. 9:42pm bowl set to be vessel as well as food\_bowl in group. Works. Looks like group membership is stackable. bowl of milk, bowl of free milk made vessel. bowlofwater and pock powder vessels. Some other cucina items and pocky bowl, pocky mortar and pestle, clay bowl, bucket of milk. liquids including bucket fills. Didn't find apparent vessel shelf texture in two mods folder searches. 10pm.

Bit too many empty pokeballs appearing.

7:55am 27 Dec 2023 Time to tidy up the pock into one folder and take a step towards the dual block slope crafting, annulments...

8:54am After some casual reading, a short break, then to begin. 9:00. So, a basic followable list of code segments in one file. Or, just quickly copy.... see the thing about giving yourself instructions is you bunch up all the operations and it seems like lighter, but it's because things are omitted, and not because of being busy but because you accidentally create more work because you create a new expression for the work with a corruption of timings. Maybe. But just copying the mods altogether as well as the default folders and trying to piece it all together again from just the things you need to... Have angled walls and physics. I'm thinking singlenode seed and stripped defaults. But the base game is already altered a lot... well, let's go! 9:14am. Or should I work on all the things for, say, a spaceship here in Jangle? Like, a food dispenser, Medipack dispenser, armor dispenser, ... Jet fuel... Best things first!

Look, it's hard. I'm just going to copy out the folders... 9:23am That's all the mods, and the mods in the other default path category.

9:50am probably have to change the name of the game if I'm taking stuff out of the 'game'. 10:05am are there other 'drawtypes'? Perhaps a convex hull drawtype or some other... if a node is 3 times enlarged it may be surrounded by just air I suppose. vectors are at /usr/share/games/minetest/builtin/common/ but in /builtin/client/death\_formspec.lua it's spelled bultin for some reason. 10:55am 11:17 found gravity there... in falling.lua, funnily enough.

11:47am Look, all I'm supposed to be doing is clearing away some of the blocks I don't use from the menu, but I'm thinking of the general value of a rotating or 'rollable' axis of left-right avatar turning, that is, that the poles shift. And for mobs too I guess. And local gravity. Or... How about just randomising loads of stuff for load by load basis fun?

12:42pm I think, all the block types with pocked steel would do. Also furnace could be engine burners and food be dispensed. But pocked steel is very bright. 12:52pm changed player height to 0.7 and node selection box to that height in mods/player\_api of the default path. Again to stepheight 1.1, heights 0.4. You're a dwarf. Stay on the planet. Eye height was 1.47, step height 0.6, box 1.7. Changed again in api.lua. Changed in 3 placed with size from 1,2 to 1,1. Works. It would be stellar if creep 'X' was crouch. Added stax for player. Visual = 'upright\_sprite' probably keeps avatar upright. And then maybe just sprite for the rotatey one. Player api textures.

1:48pm Would be great to make panes swivel open for item interaction. Collisionbox still 0.5 too low. 1:52pm 4:22pm Added 90 'you are dead' messages that don't say you are dead, to death\_formspec.lua, now to use the circular saw style array and math random to lotto drum it in. 4:56pm doesn't seem to... work. Also view height lowered to below 0.5 height. Checking... death\_formspec may not load the 90 messums without 'clientside modding', so check config.5:11pm went through menu settings to enable all in client modding option (setting to '0'), but no death note. 6:48pm produced mesh wrap for player to suit goblin stax style but seems to revert to some adventurer png instead. Back to normal appearance, but retaining goblin size. Must find adventurer texture to change it

```
to those placed in 'player_api'. 7pm Will have two new mobs with that texture
though, modelled on rat. 7:21pm Two goblins, a tame one and a wild one, are in. I wonder if I changed the pocky orb 'arrow' that strax fires to visual =
'wielditem' would it be catchable in the air like a regular ball?!
10:19am 29th Dec 2023 Added a mod by zorman2000, npcs.
There are 4 default dialogue types: marraige, casual trade, dedicated trade and
custom trade. Try first making dialogue a property of a plantlike node. 10:46am
strux is upright_sprite so see front and back. Just Stax. ..
12:22pm 'DIALOGUE's going to be 'char' types (the jangletons). phases are lvls.
What if, actually, phases were your color type, like red green or blue? let's
just do it that way. phase => color.
2:25pm not using
jtons.dialogue.YES = "Yes"
jtons.dialogue.NO = "No"
jtons.dialogue.DK = "I don't know"
      options_dialogue = {},
      yes_no_dialogue = {}
}.... in dialogues. Not adding yes/no game.
```

2:37pm FIRST\_NAMES => Colors. FNs based on sex, colors based on character. npc.lua => j001.lua etc. Function of sex and age changed to character and color. Everyone has a choice of colored outfits with the ordering jtons.data.char.colors but I could have them grouped by color first, say 4 or five textures of each color theme, (then unless they're in suits, sex), then one is assigned to each name, so there'll be lookalikes but not dopplegangers, of course, but importantly the textures are assigned to each name based on the color assigned to them. But here's focussing on the first case. The colors are just j001's wardrobe. 3:10pm sex should be changed to color because I found a chunk in npc.lua that balances spawning chance to the more sparsely populated sex, line 223 ...3:34pm
5:48pm Dialogue should have both conversationalists' text appear in order in chat during chat with one of them. Yeesh! 5:50pm added goblin texture to npc adults... 6:03pm copied out the dialog bits into tabbed forks for humans to judge after.

3:48pm 02/January/2024, Nanping. Shane McDonagh. Copied backup of everything Minetest, including the world 'Tinny Jangle', mods, notes, ambitions, and all the files on usr/share/games/, to the ft/Programs folder in the partition drive. Then moved a clean install that was on /ft into /s, and deleted the 1.2GB debug copy. I am free to supress any chunks in this runtime environment, that is, delete recipies, nodes, functions, meshes, textures, mods, and undistinguished mechanics, because I am not concerned, having a copy. 3:58pm 4:35pm

5:57pm Drew background and icon for 'wedi', a development base. Added 'sfinv', 'player\_api', and 'game\_commands' mods from minetest\_game over to minimal, to try to get the standard creative inventory, as I test out the minimal development world before doing things to wedi. Want the sprite. Took all mods out of minimal. you get a sprite, but it's the green thing in builtin you want. To change to stax. Took player.png and player\_back.png out of minetest/textures, replaced with stax textures of same name. Next to bring enough to handle player height, step height and collision/selection box in from default/player\_api/api.lua and form some file.lua. Yeah stax avatar looks great. 6:36pm Reduced 'teleport' command to 'tp'. 7:42pm Just have svinf and

gamecommands in minimal. 7:56pm Found a good way to start the making of a few different shapes of the one stone. In minimal/mods/stairs/init.lua a function is defined to register a node of a shape of your choice, with a number of variables like groups, recipeitem, image... Find out how the saw-cut-slopes manage without a selection box per se. 8:11pm Well, I've a mind to look well upon the few cuts of slopes in moreblocks/stairsplus/defs.lua, which leaves the .obj to decypher. They are the visual aspect, the non axial planes.

q top v 0.500000 0.500000 0.500000 v -0.500000 0.500000 0.500000 this v -0.500000 -0.500000 -0.500000 It walks v 0.500000 -0.500000 -0.500000 boundary edges. vt 1.0000 1.0000 same vt 0.0000 1.0000 plane, vt 0.0000 0.0000 to it, vt 1.0000 0.0000 surface. vn 0.0000 0.7071 -0.7071

s off

f 2/1/1 1/2/1 4/3/1 3/4/1

to see

g bottom

representation.

v -0.500000 -0.500000 0.500000

v 0.500000 -0.500000 0.500000

v -0.500000 -0.500000 -0.500000

v 0.500000 -0.500000 -0.500000

vt 0.0000 0.0000

vt 1.0000 0.0000

vt 1.0000 1.0000

vt 0.0000 1.0000

vn 0.0000 -1.0000 -0.0000

s off

f 6/5/2 5/6/2 7/7/2 8/8/2

g right

v -0.500000 0.500000 0.500000

v -0.500000 -0.500000 0.500000

v -0.500000 -0.500000 -0.500000

These four coords define the non axial plane that characterises the basic slope which

obj file represents to the computer.

round the vectors defining the

These echo the previous four, walking the route through a normalised transform of that and is followed by a vector that is normal

and oriented outwards from the volume's

I will switch the first two trifracs what it does to the visual

```
vt 1.0000 1.0000
vt 0.0000 0.0000
vt 1.0000 0.0000
vn -1.0000 0.0000 0.0000
s off
f 9/9/3 11/10/3 10/11/3
g left
v 0.500000 0.500000 0.500000
v 0.500000 -0.500000 0.500000
v 0.500000 -0.500000 -0.500000
vt 0.0000 1.0000
vt 0.0000 0.0000
vt 1.0000 0.0000
vn 1.0000 0.0000 0.0000
s off
f 12/12/4 13/13/4 14/14/4
g back
v 0.500000 0.500000 0.500000
v -0.500000 0.500000 0.500000
v -0.500000 -0.500000 0.500000
v 0.500000 -0.500000 0.500000
vt 1.0000 1.0000
vt 0.0000 1.0000
vt 0.0000 0.0000
vt 1.0000 0.0000
vn 0.0000 -0.0000 1.0000
s off
f 15/15/5 16/16/5 17/17/5 18/18/5
```

Also switched unknown\_node texture to moss and unknown item to glowing blue orb, and unknown\_object to basketball, for aesthetic reasons. Going to reload all the original stuff and play around with that obj file until it makes sense to me. 8:42pm The normal mods are in folder 'minetest\_game' so just reloading from the backup folder. Actually this is as easy an operation as ever but it just becomes so tantalisingly clandestine when you think of all the fun that goes on because of it, from a player perspective, like a kind of stupid tradition of pretending to press a button you remember pressing, it's going to test my patience, depending on whether I can conceptualise such a process. For it is top-heavy, overly tense, easy to get wrong, it's the run from base 1 to base 2, where you get lost if you don't focus, where all the other places are equally accessible, where you're not allowed to dilly dally, where you leave the classroom where you just had an exam and find yourself all too capable of challenging the campus grounds in line with the exam questions.

This notes file was in the .minetest folder that was moved back to ft, and I saved the minimal, in which I placed 8 standing stones in a circular depression on a grassy knoll. Then I cut the TJ .minetest and returned it to where it had been for months, in s. 8:53pm. swapped first two trifracs. 2/1/1 and 1/2/1 swapped around in moreblocks\_slope.obj. Game won't start. Switching them back to see if it was related to the switch. Done. Btw this file is now in [/media/s/9a8ea8a7-3cba-4676-95a3-f759dea45cb2/home/ft/Programs/Devtestbckp02jan 24/.minetest] No, it's unrelated, of course... Could be because I changed something in usr/ path.

I'm quite sure the debug.txt is not essential and reproduced without consequence during gameplay if deleted. 9:06pm. If it's not really a minetest problem but one of the other, general problems with the Thinkpad in line with heat-closures, cursor-fits, freezings, and programs not starting after being shut down, then a restart might fix it. 9:14pm When I moved .minetest from s first the warning permission denied moving hearts0.png came up and I clicked cancel, which may have interrupted the move operation from that point, or skipped a slew of similar cases. Again, this time permission denied moving the same folder that I copied back, but that means something else must have fit the description and yet got through before. That is, following human border checkpoint logic. I'll try the folder with the circle of stones again.

Copied the .minetest with TJ back to the ft backup folder. The logic is that

there might be some fragmentation due to incomplete copying or something of the nature of 'a missing file' in the hundreds of files making up the folder, that doesn't neccessarily jar my confidence that the world remains fairly reloadable, but means it makes sense to try to reverse steps taken, going back to the most recent acceptable state for development, or retake the most stable, the most generally humanised and non-historic-activity-specific, that is, the most originating move towards reacquiring the functioning software neccessary to load the ubiquitous game. The former is far more enlightening a step, more harmonious with a gentle path, the latter more akin to falling a few floors from a tower. 9:32pm Copying the dev test circle of stones copy of .minetest to s from ft. CReated another world in minetest game, Romelis. Since TJ loads to 100% then shuts down at best, I'll just have to store the world TJ into backup and move forward with the block annulments, leaving any sentiment towards the place the minor security of having made a proper backup not too long ago, and knowing also that the most recent tweaks re still in the folder- it is something unrelated probably that doesn't work, but this kind of judgement could go on and on, best not to go down that road. Computer says no, that's it. So let's have a look at the trifracs. Putting moreblocks in Romelis. swapping the first two trifracs for angledslabL.obj... producing 175 pages of crap I don't need on the menu, soon to be meddled with. What did I say once? Meddling, Trifling, and being Concerned about...don't x if you can Y. I don't know. Man it's the wrong mod, I wanted to go with angledstairs, start again, yeesh! An angled slab left is down and I'm swapping the trifracs. No noticeable difference. I do notice that the selection box for the thing is a whole unit volume box, too big, it bothered me before in the villages. You don't want to be hitting it...10:15pm another swap. all five of the 'f's have first two trifracs switched, and no change. What about swapping lines. Moved first to after the last. Set selection\_box = collision\_box in anglestair init for angledslabL. Doesn't seem to change the big selection box in game. set selection\_box part of angledslabL's regnode to the same bunch of vector defined volumes as collision\_box. No change. It Should be made to be just like the 'moreblocks' nodes. Also a finer partitioning for selection boxes could be made for the slopes in moreblocks. This can be done with reference to the representations in Romelis as it grows into hopefully a single mod that uses a single block type, like clay, concrete, or desert sandstone, or stone block or endstone, or cement.

8:19am Don't hold me to this, but how about stone block chinese characters as well?

10:34pm

It's Brilliant, and feels easier to think about right now, as I sit muddled in the loring morning. It would be... cool if there was an api for it, a simple text field to input a character... Then you could throw a rune (better with runes, maybe) down on a flat patch of wall to define it.

1:35pm 2:09pm set stair n slab for in the minimal. Added stone and grassy dirt. stairs and slab made to just work with stone. 3:01pm Registrations in stairsplus in moreblocks is where all the excess, as I see it, comes in. Making lean version based off Hugo Lucurcio's.

3:55pm minimal has stone types from moreblocks and angledstairs. added screwdriver and pkarcs for stone. 4:13pm. 4:37pm heart texture is a stax overlayed on blue hearts, but you can't see the hearts, it's more like wings. Gave staff to wieldhand and front and back textures. Minimal looking a lot better now.

6am 4/Dec/24 Finally put ionfury cheatcodes on the desktop, so should be able to have a look at a mysterious world of doomed treasure, if I want. Or will it feel like being a top evil empire official who the monsters and demons bow to and revere? Getting the 'clean hands good shirt' walking tour. It's a matter of thinking. It's a masterpiece, I think, there was some good reviews. Cooking beans and it's been a good few days in the fridge with the tin open I hope that vinegarry whiff was part of the flavouring! But I rinsed them and they're gonna boil and rinse and boil and rinse, cos I think it's probably surface bacteria only to worry about.

6:40am Stone gyphs in minimal with (only a plan) light box toggle and real torch timed fadeout to regular stone, or a version of regular looking stone that cycles by one to the unlit glyph again. .. 6:49am a cracky looking version of stone, that can be broken without pick, by hand. (plan). What about overlays?

Some black/bright blue layer under a hollow rune cut in stone. 9:40am Make a block with 'tiles' defined as with television, groups like stone, animated rune glowing... Realtorch has three .lua files, remove two at a time leaving one of each and test to see what is the live executable: init.lua (this, probably) 2d.lua or 3d.lua. init.lua l14 error refers to 2d.lua. All are used, to include ceiling torch. Won't be used in new mod. altering runes is a quality of the hand that touches them. Rune bu and ke, bu is modelled on realtorch so far. hand in default folder, of minimal. Seeing the rune stone from an angle which occludes the front will make it indistinguishable from a regular stone, yet touching a rune lights it up, if touched with the hand. Hitting it with a pick will give a regular stone, if it's not glowing. If it is glowing it is indistructible. Look at dirt with grass. For now, they can be mined to give an unlit rune, only if mined when lit, and an unlit one gives only stone if mined (to do). But I'm setting the lit one to cracky=1 and the unlit one to cracky=3 which essentially makes it the former case. Textures done unanimated.11:05am. Next, cracked stone. Breakable by hand (staff), and a small door. (Perhaps even small left and right doors like in pkarcs). Damn, accidentally deleted everything in runes/init.lua, saved the older version over the newer - the older was still open in mousepad and looked like a conf.txt.

- 11:28am replaced regnodes for unlit runes, adding particle effects and sounds for the runings. Color- coded because red and blue for bu and ke. Done, based just on tnt and bubble for now. Unlit rune gives scree when mined. 11:41am Changed to stone actually as mentioned earlier, because you can see it from any other angle than front as stone. If lit, it mines out to scree. Or... just the unlit rune stone maybe? No. Scree. You don't get it: what fool would mine a glowing runestone? Time to test. Cool, lit runes place oriented only one way, screwdriver not working properly with them. Now to test the unlit ones see if they light. They don't. 11:56am
- 1:37pm Way to overlay as with ored stone. using '^'. Fixed rotations with screwdriver, using paramtypes and nodebox fixed volumes, simple nodereg descs. While you're there, change node box shape for angled stairs... 2:37pm Started folder diagstep, for the working stone angledstairs to be put into, and hopefully a go at changing the selection box, probably in mesh.
- 3:38pm Diagsteps added, just ther right ones, two of them. There are two additions needed to make an efficient diagonal tunnelway using these two each with an extra 1/8th volume. Replacing the stone to a non oriented stratification texture.4pm added quick sketch of animated 'glistening' texture for 'ke', yet to add to the overlay in default. Might not work. worked but the overlay stretched the underneath stone.png layer, making the background appear animated. 4:14pm 4:44pm updated rune\_ke\_ani.png. 5:44pm rune\_ke\_ani smoothed out too. Lowered duration for regular torch and noted it fizzled out after about half a minute, I guess the numbers in settings.txt are seconds. Hasn't been apparent that runes are follwing it yet.
- 6:53pm smaller than half slabs drop unknown item.
- 8:33am Grass/stone textures done for slope and 2:1 slope. Grass\_stone node placeable and rotateable with screwdriver.9.04am Next, 2:1 g/s.
- 11am Placed a few 3/1 type gras stone nodes in stonecircle on minimal. should darken glowing rune inset stone to match unlit neighbours, so only rune glows. Would overlay darkener. 11:24am Now stone and rune is a bit too darker compared with grass stone. 11:53am Ok it's fine now. At least during the day it's the same.
- 12:31pm all stone textures same, more smudgy labelled 'default\_stone.png' like originally. Same thing I did with grass, to have it for water too would be a major upgrade... Water could also be mere cosmetic for this, in minimal. But also half-height water level. Or 'pondwater'... minetest\_game TJ has no 3Darmor mod, so blue suits are balls. Fixed 12:48pm. Backed up minimal's lean mods to ft drive, and to usb.
- 7:16pm Because 'Client Side Scripting' is disabled, there's no commands, so you can't give privs or fly or teleport in survival that way, until it's repaired. 7:56pm Just added 'Hui' as standard rune for now, just like Bu and Ke. 3:28pm
- added more standing stones. Same dimensions, bigger, wider circle, maybe they look similar enough from the middle. Lowering the radiance of the runes. 4:20pm added 3x3x6 and 4x4x8 standing stone blocks around, and panels and microblocks

8:31am 8:49am nodebox altered to having three step volumes for stairs, but no effect, even adding selection box same. Maybe because stairs ingame load from moreblocks mod. 8:54am slightly increased to volume of simple microblock (0.1 each direction) and it shows in game. but adding more volumes didn't make the checker tet I inputted. Added 'four\_sides\_o'. Temporarily removed a side from 'two sides' and that showed, so why didn't the microblock accept another volume? 'fixed' descs differ. No, even with fixed, it works if you get the parsing right. 9:41am gonna test if chinese word for grass shows in inv when renamed. 草。 Didn't work. 9:46am Took out 'stairs' mod folder since it's replaced by moreblocks mod. Only 9 folders loading minimal now. 10:22am nodebox for diagonal half slope done, but I replaced half raised slope. Moreblocks as was but diagslopehalf is simple registered node in default. All moreblocks slopes should be simple like this since I'm only using one type of material for now. ETA: 1 hour. 10:58am. 12:11pm redid stone circle because the names for the grass stone nodes changed when I took them from default into 'stones'. 2:11pm Higher res mesh for diagslopehalf, and diagsteps ported to minimal again free regged in stones folder. step too. 2:15pm. 2:39pm Arcs addes to Stones. 2:59pm slope added. 4:08pm adjusted slope\_inner ogj top face for -90Deg rotation. Whoops, wrong direction. Re-rotated it but thetop's gone now, even after rotating the 'vt' segments... It wasn't gone after the first rotation, so what's the difference? 2nd: g top v 0.500000 0.500000 0.500000 v 0.500000 0.500000 -0.500000 v -0.500000 0.500000 -0.500000 v 0.500000 -0.500000 -0.500000 v 0.500000 -0.500000 -0.500000 vt 0.0000 1.0000 vt 0.0000 0.0000 vt 1.0000 1.0000 vt 0.0000 1.0000 vt 0.0000 0.0000 vt 1.0000 0.0000 vn 0.7071 0.7071 0.0000 vn 0.0000 0.7071 -0.7071 f 3/1/1 2/2/1 4/3/1 f 2/4/2 1/5/2 5/6/2 1st: g top v -0.500000 0.500000 -0.500000 v 0.500000 0.500000 -0.500000 v 0.500000 0.500000 0.500000 v -0.500000 -0.500000 0.500000 v -0.500000 -0.500000 0.500000 vt 1.0000 1.0000 vt 0.0000 1.0000 vt 1.0000 0.0000 vt 1.0000 1.0000 vt 0.0000 1.0000 vt 0.0000 0.0000 vn -0.7071 0.7071 0.0000 vn 0.0000 0.7071 -0.7071 f 3/1/1 2/2/1 4/3/1

in the middle.

f 2/4/2 1/5/2 5/6/2

```
I suppose I'd better rotate the mesh. ETA 25mins. Or just copy in low res
version. easier than rotating this: \{-0.5, -0.5, -0.5, 0.5, -0.4375, 0.5\},
{-0.4375, -0.4375, -0.5, 0.5, -0.375, 0.5}, 
{-0.5, -0.4375, -0.4375, 0.5, -0.375, -0.4375},
{-0.5, -0.375, -0.375, 0.5, -0.3125, 0.5},
{-0.375, -0.375, -0.5, 0.5, -0.3125, -0.375},
\{-0.5, -0.3125, -0.3125, 0.5, -0.25, 0.5\},\
{-0.3125, -0.3125, -0.5, 0.5, -0.25, -0.3125},
{-0.5, -0.25, -0.25, 0.5, -0.1825, 0.5},
{-0.25, -0.25, -0.5, 0.5, -0.1825, -0.25},
{-0.5, -0.1825, -0.1825, 0.5, -0.125, 0.5},
{-0.1825, -0.1825, -0.5, 0.5, -0.125, -0.125},
{-0.5, -0.125, -0.125, 0.5, -0.0625, 0.5},
{-0.125, -0.125, -0.5, 0.5, -0.0625, 0.5},
{-0.5, -0.0625, -0.0625, 0.5, 0, 0.5},
{-0.0625, -0.0625, -0.5, 0.5, 0, 0.5},
{-0.5, 0, 0, 0.5, 0.0625, 0.5},
\{0, 0, -0.5, 0.5, 0.0625, 0.5\},\
{-0.5, 0.0625, 0.0625, 0.5, 0.125, 0.5},
\{0.0625, 0.0625, -0.5, 0.5, 0.125, 0.0625\},\
{-0.5, 0.125, 0.125, 0.5, 0.1825, 0.5},
\{0.125, 0.125, -0.5, 0.5, 0.1825, 0.125\},\
{-0.5, 0.1825, 0.1825, 0.5, 0.25, 0.5},
\{0.1825, 0.1825, -0.5, 0.5, 0.25, 0.1825\},\
{-0.5, 0.25, 0.25, 0.5, 0.3125, 0.5},
\{0.25, 0.25, -0.5, 0.5, 0.3125, 0.25\},\
\{-0.5, 0.3125, 0.3125, 0.5, 0.375, 0.5\},
\{0.3125, 0.3125, -0.5, 0.5, 0.375, 0.3125\},\
{-0.5, 0.375, 0.375, 0.5, 0.4375, 0.5},
{0.375, 0.375, -0.5, 0.5, 0.4375, 0.375},
\{-0.5, 0.4375, 0.4375, 0.5, 0.5, 0.5\},
\{0.4375, 0.4375, -0.5, 0.5, 0.5, 0.4375\}\}
Notes from obj
transformation from original:
(000) - > (001) (001) - > (101)
(010)->(011) (011)->(111)
(100) - > (000) (101) - > (001)
(110) - > (010) (111) - > (110)
is clockwise 1/4 turn
Other way:
(000) - > (100) (001) - > (101)
(010) - > (011) (011) - > (010)
(100) - > (000) (101) - > (100)
(110) - > (111) (111) - > (110)
Those for vs, and for vts,
These rotated:
(00) - > (10) (01) - > (00)
(10) -> (11) (11) -> (01)
for anticlockwise 1/4 turn
```

6:51pm most steps added, skipped some for now, may find use. Alter halfdiagl and r obj. Changed full x coords to half wherever seen as input but no effect. Moving on to half angled slab instead. Oh wonderful. 7:04pm 7:18pm Done. 7:27pm added raised half slopes but wrong names after blind switch. 7:37, want 2:1 angled stairs, but first, another go at halving the diag half slope in .obj file. 7:52pm done, and proud. Let's see if the next ones work (they should I think.) It's a set of raisedangledstairhalfslopes, just the halfslopeangledstairs, and a combination of the two done already, with parallel halfslopes one raised one lowered in one node, so a pair of them also makes 6 good ones to do later.

5:25am 8/Jan

There is also reason to add an inner edge half quarter that goes one side to the

other of a node the way the 2/3 step sits, and the two half ones each half volume again, 1/16. Those 3. These are only but a 'step' away from the recent slopehalfleft n right. So first try cloning half slope into the halfquartslope.

```
Done. Time for a Triangle Spike node, one that rises with a centred edge. 6am
Borrowing from Half slope the obj.
7:23am to correspond obj of the box outer slope (noncut) with a new spike
centred, call it spyke. Inreasing resolution of some stones.
\{-0.5, -0.5, -0.5, 0.5, -0.4375, 0.5\},\
{-0.5, -0.4375, -0.5, 0.4375, -0.375, 0.5},
\{0.4375, -0.4375, -0.4375, 0.5, -0.375, 0.5\},\
{-0.5, -0.375, -0.5, 0.375, -0.3125, 0.5},
\{0.375, -0.375, 0.375, 0.5, -0.3125, 0.5\},
{-0.5, -0.3125, -0.5, 0.3125, -0.25, 0.5},
\{0.3125, -0.3125, 0.3125, 0.5, -0.25, 0.5\},\
{-0.5, -0.25, -0.5, 0.25, -0.1875, 0.5},
\{0.25, -0.25, 0.25, 0.5, -0.1875, 0.5\},\
{-0.5, -0.1875, -0.5, 0.1875, -0.125, 0.5},
\{0.1875, -0.1875, 0.1875, 0.5, -0.125, 0.5\},\
\{-0.5, -0.125, -0.5, 0.125, -0.0625, 0.5\},\
\{0.125, -0.125, 0.125, 0.5, -0.0625, 0.5\},\
\{-0.5, -0.0625, -0.5, 0.0625, 0, 0.5\},\
\{0.0625, -0.0625, 0.0625, 0.5, 0, 0.5\},\
{-0.5, 0, -0.5, 0, 0.0625, 0.5},
\{0, 0, 0, 0.5, 0.0625, 0.5\},\
\{-0.5, 0.0625, -0.5, 0.0625, 0.125, 0.5\},\
\{-0.0625, 0.0625, -0.0625, 0.5, 0.125, 0.5\},
\{-0.5, 0.125, -0.5, 0.125, 0.1875, 0.5\},
{-0.125, 0.125, -0.125, 0.5, 0.1875, 0.5},
{-0.5, 0.1875, -0.5, 0.1875, 0.25, 0.5},
{-0.1875, 0.1875, -0.1875, 0.5, 0.25, 0.5},
{-0.5, 0.25, -0.5, 0.25, 0.3125, 0.5},
{-0.25, 0.25, -0.25, 0.5, 0.3125, 0.5},
{-0.5, 0.3125, -0.5, 0.3125, 0.375, 0.5},
\{-0.3125, 0.3125, -0.3125, 0.5, 0.375, 0.5\},
\{-0.5, 0.375, -0.5, 0.375, 0.4375, 0.5\},
{-0.375, 0.375, -0.375, 0.5, 0.4375, 0.5},
\{-0.5, 0.4375, -0.5, 0.4375, 0.5, 0.5\},
{-0.4375, 0.4375, -0.4375, 0.5, 0.5, 0.5}}}, didn't work.
11:43am 8thJan24 Cut inner slopes done, renaming to Cornercuts. Then their
complements can be Cornersets. Or Vcut for vertex (and V looks like a vertex).
12:52pm Renaming: Don't get me wrong, I'm not trying to confuse myself, but the
new names have deeper connections with the spirit of the lines that make up the
blocks, they're a compromise between loyalty to the School of Mathematics I was
'Raised' by and the slippery 'Slope' of 'Half' baked diggotry that goes on in
these government circuits. lol.
1:09pm Cross corner sids skewslabs.
Translate: (-1,1,1)->(0,1,1),
(0,1,1)->(1,1,1),
(-1,0,1)->(0,0,1),
(0,0,1) \rightarrow (1,0,1) in skewslab_r.obj (for some reason right and left are inverted
in obj files, so it's important to be noteful and wary) 1:29pm Mesh for sku3_l
done, box left, obj bot right to top left.
Translate: (0,1,1) \rightarrow (-1,1,1),
(1,1,1)->(0,1,1),
(0,0,1)->(-1,0,1),
(1,0,1)->(0,0,1) in sku2_l.obj. Or 'wherever z=1, deduct 1 from x.' Ok that's
alright for now, they'll be visible. Do box as bunch of squre plates goin up the
length. though not a good true construction method, it's easy to configure. 1:50
Whoops, only half z depth:
\{-0.0625, -0.5, -0.5, 0.5, 0.0625, -0.4375\},\
      \{-0.125, -0.4375, -0.4375, 0.4375, 0.125, -0.375\},\
      \{-0.1875, -0.375, -0.375, 0.375, 0.1875, -0.3125\},\
```

```
{-0.25, -0.3125, -0.3125, 0.3125, 0.25, -0.25},
      {-0.3125, -0.25, -0.25, 0.25, 0.3125, -0.1875},
      {-0.375,-0.1875,-0.1875, 0.1875,0.375,-0.125},
      {-0.4375, -0.125, -0.125, 0.125, 0.4375, -0.0625},
      \{-0.5, -0.0625, -0.0625, 0.0625, 0.5, 0\}\}
Change to:
      \{-0.0625, -0.5, -0.5, 0.5, 0.0625, -0.375\},\
      {-0.125, -0.4375, -0.375, 0.4375, 0.125, -0.25},
      {-0.1875,-0.375,-0.25, 0.375,0.1875,-0.125},
      {-0.25, -0.3125, -0.125, 0.3125, 0.25, 0},
      {-0.3125, -0.25, 0, 0.25, 0.3125, 0.125},
      {-0.375, -0.1875, 0.125, 0.1875, 0.375, 0.25},
      {-0.4375, -0.125, 0.25, 0.125, 0.4375, 0.375},
      {-0.5, -0.0625, 0.375, 0.0625, 0.5, 0.5}}},
Again, whoops, made a king of pointy bit where the front should have casted an
equal square:
\{-0.5, -0.5, -0.5, 0.0625, 0.0625, -0.375\},
\{-0.4375, -0.4375, -0.375, 0.125, 0.125, -0.25\},\
\{-0.375, -0.375, -0.25, 0.1875, 0.1875, -0.125\},\
\{-0.3125, -0.3125, -0.125, 0.25, 0.25, 0\}
{-0.25, -0.25, 0, 0.1875, 0.1875, 0.125},
\{-0.1875, -0.1875, 0.125, 0.125, 0.125, 0.25\},\
{-0.125, -0.125, 0.25, 0.0625, 0.0625, 0.375},
\{-0.0625, -0.0625, 0.375, 0, 0, 0.5\}\}
Change to:
\{-0.5, -0.5, -0.5, 0.0625, 0.0625, -0.375\},\
{-0.4375, -0.4375, -0.375, 0.125, 0.125, -0.25},
{-0.375, -0.375, -0.25, 0.1875, 0.1875, -0.125},
{-0.3125, -0.3125, -0.125, 0.25, 0.25, 0},
{-0.25, -0.25, 0, 0.3125, 0.3125, 0.125},
{-0.1875,-0.1875,0.125, 0.375,0.375,0.25},
{-0.125, -0.125, 0.25, 0.4375, 0.4375, 0.375},
{-0.0625, -0.0625, 0.375, 0.5, 0.5, 0.5}}},
Done, looks ok, but now I can see a few more changes easily made, like
quaterface R5/2 to edgebot or edgetop, either side, that's four each for the four quarters. Feel like doing 16 some day? Do that. It would bring continuity to the
skus. Maybe drop some if they don't appear fundamental enough, then think of
adding qrface to full edge bot and top. It's a very very good addition, all
valuable. You've going up a set of{r5/2, r2, r9/2=3/2, R6/2} edges. But it's a
spike. Flat ones have support. A subset of the edges.
5:38pm Using hooded figure character upright sprite as player in builtin
textures, clipped from IonFury, the low maintenance game recently rebooted on
steam, and given a staff instead of a futuristic gun, grey eyes instead of red,
no shadow.Cold.
10:10pm 9/12/24 Textures for 11 npc's to be quickly based mechanically on strax
the orb hoverbot as upright sprites in minimal. (Rhs keys stopped working as
laptop overheated during emblemming characters out of screenshots and resizing
with pinta. Glad they're back.) 10:26pm Thinking of naming the 11 sprites after
the 11 mob animals. Forgot the supervisor of the pipe factory, Lamb, to be the
demopay of minimal...10:46pm done.
Since the sprite spinoff from mobs didn't work I'm putting normal mobs into
minimal to see if it works. It's 'mobs' from the ft drive. ... Since inventory
didn't change, i think it didn't load, so took 'mobs' back out and instead
loading 'mobs' in optional mods api in menu. Deleting sounds as they are
highlighted by error notice, from mods/mobs/crafts.lua
            sounds = default.node_sound_wood_defaults(),
      sounds = default and default.node_sound_leaves_defaults()
Loaded updated inv. So 'mobs' in home .minetest folder works with minimal, now
```

Loaded updated inv. So 'mobs' in home .minetest folder works with minimal, now to port it into the minimal folder to load as a default mod. Works same. Now can edit. 11:15pm removed stuff from crafts... 11:55pm Threw something together

```
there. 12:03am 10/12/24 Well, looks like Swinepine's in, immediatley moves around randomly, but is half in the ground, so updating...12:05am right size at
least, if there's a few extra clones wandering about... Now to add the rest, and
halt them in the stone circle. Let's just see how simple they can be mekked.
removed:
      passive = false,
      attack_type = "dogfight",
      group_attack = true,
      owner_loyal = true,
      attack_npcs = false,
      reach = 2,
      damage = 2,
      hp_min = 5,
      hp_max = 105,
      armor = 200,
      makes_footstep_sound = true,
            And left rest as
      walk_velocity = 0,
      run_velocity = 5,
      jump = true,
      jump\_height = 3,
      pushable = true,
      view_range = 100,
      light_damage = -1,
      fear height = 3,
Good. Removed clones, and Swinepine (texture taken from the Vampire story game
by Scumm) stands in the rune stone circle like a guy in a skatepark ready to
tell you what to do for golden stars... The code is short and going to be
shorter:
local S = mobs.intllib
mobs:register_mob("mobs:swinepine", {
      type = "npc"
      hp_{min} = 10000,
      hp_max = 10000,
      collisionbox = {-0.4, -1, -0.4, 0.4, 0.95, 0.4},
      visual = "upright_sprite",
      visual_size = \{x=1, y=2\},
      textures = {{"swinepine_f.png", "swinepine_r.png"}},
      walk\_velocity = 0,
      run_velocity = 5,
      jump = true,
      jump\_height = 3,
      pushable = true,
      view_range = 100,
      light_damage = -1,
      fear_height = 3,
      on_rightclick = function(self, clicker)
            if mobs:feed_tame(self, clicker, 8, true, true) then return end
            if mobs:protect(self, clicker) then return end
            if mobs:capture_mob(self, clicker, 0, 5, 50, false, nil) then return
end
      end,
})
mobs:register_egg("mobs:swinepine", "Swinepine", "swinepine_f.png")
Putting them all together in [swinepine.lua renamed to sprites.lua].
12:32am finally all 13 added, and they run really fast if you hit them by
accident so be careful! I'll have a look at simplifying it some more later.
```

Demopay didn't load rear texture, went and hit it and left the circle, but not

outside the wider circle so it's still good. Not demopay, inokuin. It was inokuin\_b instead of inokuin\_r. They're jumping, some of them. Rmoved some stuff. 12:40am. But they don't turn, I want them to. Gave vieko visual range 100, not that it's relevant to what they're doing, but it should create the appearance of scanning. Nothing yet, and swinepine still jumps. Ok they all jump but only 0.1 high, and they run if hit. Their health is so high that the only way to recall them is to give them a key, a nametag, callback or spinout, whatever those might connote later on. 12:54am All 13 are in the circle, I'll make the avatar stax again now. I'll just make them jump a bit less, 0.0625, it looks like toy figurines talking to each other. I wonder now if I added another texture to the sprites in the list, would it spread like a star shape thing? Nope, but that would make sense wouldn't it?

They ar nameable with the nametag, which works to perfection actually. Should remove the other things like protection runes and callback, spinout, since they don't seem to do anything. Lvl 1, 2 keys, callback and pod. spawner.lua cut to temp. No prob. 1:08am

nametag renamed to ainm so the inv puts it before the character icons, then the texture renamed to nom.png because it looks like a blue pill. But it's like a ball that might be passed around while people introduce themselves at some company or helpgroup meetings. Want to make it an even number, but I guess 13 is plenty. That's 13 upright sprites and a naming ball (like lucy seeker's crystal futre-telling ball!!?!).

Got to make the hand not damage them when punched with left click. cut minetest.register\_tool("default:pick", {

description = "Pickaxe",
inventory\_image = "default\_tool\_woodpick.png",
tool\_capabilities = {
 max\_drop\_level=0,
 groupcaps={
 cracky={times={[2]=2.00, [3]=1.20}, uses=10, maxlevel=1}
 },
 damage\_groups = {fleshy=2},

}) and set hand damage = 0. now I can think about the next step, which is programming some kind of dialog tree into each sprite. Obviously. 1:28am default is just 'hand'. stone, dirtongrass and scree moved to stones so the inventory starts with characters after binoculars and nametag. That operating mucked up all the stones because of the name change. Could I use 'default = {}' in stones, and rename them back? I'll register an alias for them. Didn't work, but error only pops up when you change the mossed out nodes. It's worth it to have the inv menu tidy. 1:41am. Thinking of removing some mods physics... here's something to do: search the lua docs for mention of visual\_type group list, like they're sprites or 'upright\_sprite's or meshes... what else? Also, can an animation be set? Sure, I guess with animation as the default texture, and if they can be set to always 'face' the player, you get the normal view. what punch does is defined on line 2809 of api.lua. 2:09am searching for visual defs in builtin ETA 15mins. I think there might be a clue to changing the sky background in textures.lua in builtin mainmenu, even if it's just the main menu... Changed menu background to a darker blue. Actually going to put a big picture in it. nothing different, but that wouldn't be the way anyway, changing it back. gave Swinepine stand and walk (but speed is 0) and run animation. Changing the health to a punch-out for replacements, because I don't like the idea of not seeing an update in older placements. I thought follow = {"default:ainm"} would work, that they would follow without moving (ie: rotate to player) but I now realise that ainm doesn't even do what it's supposed to do anymore. What happened? Should be mobs:ainm.... Could be because I might have changed hand in default. Set damage to 1 again. 3:16am it's back to the way it should be: right clicking (that is: NOT punching) with the blue ball offers a new name for a character's name field. also antifone resets the character by taking it out and putting it back in really really quick into the same place with the same name, but random health, but it's ok cos health replenishes with sunlight. What else? I'd like to add a multiple choice for the antifone's sneak and click to swap to a random alternate texture for the sprite. or animation. That's a really good idea. It's like the character has spent some time away and changes his/her clothes. It's called 'Recall

```
Positioner' but I don't want the 'positioner' bit. so... just 'Recall'. Actually
it's easy to just overlay a random colored clothes over the sprites at loadtime.
in their individual texture defs. Hmmm, the method I'm thinking of would
randomise front and back textures seperately: Inokuin would be having odd
fashion (but ... well, he might as well, mightn't he?). I'll give them a badge
or backbacks, or accessories. It's actually like a bunch of foriegn tourists
hanging around cluelessly some chinese irish mashup. Or one eejit talking to
cardboard cut outs. ha. no I'm not actually laughing. It occurs to me that
people typing at this rythm, cadence, are conversing with one another. On IM.
Right, I should give them little square halo selection boxes. or hell,
octahedron crystals like in the sims. Grand, Inokuin has a badass alt texture
with golden neckless and sunglasses on front and a bag of vegetable shopping on
th' back, but I have lost the selection box... Ok defo have to try replace some
of these textures with animations. Even if just L o n g ones. I'll start
with penta because I have two handy.4:24am doing anim with 3 images for penta.
No, swinepine first. Hmm, didn't work, used this:
{name = "swinepine_anim_1x4.png", animation = {type = "vertical_frames",
aspect_w = 64, aspect_h = 128, length = 30.0}
in place of the quoted front texture: "swinepine_f.png"
weird and with this I get neon one side and the four textures squashed down
together into one on the other:
                                   textures = {\{name = \}}
"swinepine_anim_1x4.png", animation = {type = "vertical_frames", width = 64,
length = 128, length = 30.0}}, "swinepine_r.png"},
so switching it back, I suppose.. 5:06am renamed screwdriver to ratchet to have
it in the last position in the inventory menu due to it beginning with 'w'.
Notes on transforms: flipx FX is flipping on x-axis, as png file thumbnail would
be viewed upright, and FY the y-axis, that is, vertical. Rotate is measure in
degrees clockwise, so opposite to conventional theta in the old books.
Operations are composed from left to right by the ^ symbol. It might be possible
to define a subset of an image as texture, or a non quarter rotation.
10:42am Groovy, now a R2 slope with corner grass.
11:25am Put Etoll on the blue rune 6 block potted brush with three types.
3:22pm These mofos gotta have blue octahedron badges to make them intelligent.
Then I need a talking fish, and for that I'll be trying to math em all. The
water... yeesh. Mesh changing shape like animation, at random, that's what's
needed. What a tumblemop! It would be easier to slave it up for wizarding school
this mild late winter's afternoon, to start begging for scraps of wisdom you
DESERVE! At least a non-rectilinear water-border...
4:36pm Here's something nice I found in the net:
minetest.register_node("aliens:grass", {
      description = "Alien Grass",
      light_source = 3, -- The node radiates light. Values can be from 1 to 15
      tiles = {"aliens_grass.png"},
      groups = {choppy=1},
      on_use = minetest.item_eat(20)
})
minetest.register_abm({
      nodenames = {"default:dirt_with_grass"},
      neighbors = {"default:water_source", "default:water_flowing"},
      interval = 10.0, -- Run every 10 seconds
      chance = 50, -- Select every 1 in 50 nodes
      action = function(pos, node, active_object_count,
active_object_count_wider)
            minetest.set_node(\{x = pos.x, y = pos.y + 1, z = pos.z\}, {name =
"aliens:grass"})
A simple random spawn mechanic. With the last line there, indexed list,
math.random...
minetest.register_on_joinplayer(function(player)
      local idx = player:hud_add({
```

```
hud_elem_type = "text",
            position = \{x = 1, y = 0\},
            offset = \{x=-100, y = 20\},\
            scale = \{x = 100, y = 100\},\
            text = "My Text"
      })
end)
Hud text element. What other 'hud_elem_type's are there?
minetest.register_chatcommand("antigravity",
      func = function(name, param)
            local player = minetest.get_player_by_name(name)
            player:set_physics_override({
                  gravity = 0.1 -- set gravity to 10% of its original value
                                -- (0.1 * 9.81)
            })
      end
})
Since most everything in minimal is 'mossy fits', we gonna have to reload the
old, switch em in an out! 6:09pm
Find an example of a mod or code chunk being suppressed by another mod, and use
it to get a working alternate node texture for when the main mod is removed.
10:44am 11/Jan Four quarters making Niu Bi Da Xue (A fictional University
bearing the Hyperroque Logo minus the avatar sword in the middle) cylindrical
Emblem Stone, animated with sparkling ant-pixels on the stone perimeter, done.
Noticed one of the quarters wasn't showing a top texture, thought it was the
area wasn't filled properly in /minimal/mods/runes/init.lua's regnode for nbdx1,
but on further inspection it was ideal for a hollow cylinder, bot me thinking
while changing it back, could be used as an entrance taking the block as ladder
type, with a cover bearing that insignia and holding it a pixel lower than -0.5,
if the cylinder were to be lowered correspondingly deep, perhaps 1/16, and the
top could be given trapdoor mechanics, which I haven't done yet, nor have I done
doors. Also, a basic hollow cylinder sounds good. Or one that turns into the
square. Looking back is easy, seeing it in front of you takes some precision and
file management, a bit of egolessness. As it stands, it's enough.
Now, the animal game plays on hexagonal lattice, I want blocks to cover the
(111) plane of a cubic lattice, making the long R3 surface in half a dozen
colors, roughly, playable with further animal pieces. The pieces, like runes,
flip. They flip over, and stack, so they might be placed to appear parrallel to
the R3 plane of the boardgame. How to form the cell slopes? I could also alter
gravity to accomodate a complete rotation of the world over to a flat hexagonal
lattice, changing what may be returned to still with joy. 10:58am
Quick sketch: look at basic 7-microblock, it has a cavity that I could try to
fill with a colored piece that places in that location, BELOW the registered
coordinates of the placed colored piece.
Easy thing is to use the non sloped texture first. But look, you could use the
one K-flat, (corner 3 flat slabs) and looking at a tessellated hex plane of
convex such, place textures underneath in layers, IF textures can be placed such
that they appear out of the usual node's unit volume bounds... This, coupled
with clever animation or logics...
11:17am changed flat_3(K) to place so that looking at the inner corner is
looking (1,-1,1), ie, x and z are positive.
11:26am Yes, selection boxes allow for extra-nodalities.
I don't get why the flat K didn't angle up to +x+z... using
\{-0.5, -0.5, -0.5, 0.5, -0.375, 0.5\},\
{-0.5, -0.375, 0.375, 0.5, 0.5, 0.5},
\{0.375, -0.375, -0.5, 0.5, 0.5, 0.375\}
```

took back out

```
description = "Piece of Red",
      paramtype = "light"
      paramtype2 = "facedir",
      tiles = {"red.png"},
      groups = {cracky=3, oddly_breakable_by_hand=0},
drop = "runes:pc_1",
      drawtype = "nodebox"
      node_box = {type="fixed",fixed={
\{-0.5, -0.8, 0.5, 0, -0.5, 0.7\}\}
})
leaving it a smooth 4 page menu.
1:17pm Underside of nbdx embtone textureless, want to add neon clock face, the
four quarters displaying a kind of clock hand going round, perhaps in real time,
one minute, like in 'Countdown'. Also the internal area of the underside face is
depressed inward, maybe by half, to protect it, kind of. So it's twice the
node_box data... I think that's still ok.
Wait, I can just overlay it on the top and have the bottom as original, scree.
And no further node alteration... Or, lower the lot, and ...raise or lower 12
subvolumes around the top surface that blink in a circle, again using seperate
overlay... I should do a solar system model kind of thing. But first, just scree
the bottom of this stolen hyperroque emblem for the tourists in the marsh ruins.
just change scree to rubble. Sure I'd be looking at the solar system for AGES!
1:32pm ...1:56pm I would use sprites for anigam pieces.
      local sprites.t = math.random(0,1),
      textures = {{"beka_f_"..sprites.t..".png","beka_r_"..sprites.t..".png"}},
didnt work.
      Nor did beka_outfits =
{"{"beka_f_0.png", "beka_r_0.png"}", "{"beka_f_1.png", "beka_r_1.png"}"} with
      textures = {beka_outfits[math.random(0,1)]},
      ...exactly...
      So it's just gonna be that she wears Lamb's 'rare mink cloak'.
2:55pm Could I use the naming item 'mobs:ainm' to also rename individual
blocks?. That would mean I wouldn't have to struggle to remember what's what if
I use them as board game pieces.
3:14pm dunno why, but I have this habit, besides smoking, of closing on a full
deck, that is, it's mighty attractive to finish up with four pages only, for
some reason, of inventory options... Now it's full, so to add 'blackwater'
which should spread provisionally and simply to cover little spaces around it, I
might remove the unused phone thing, the .. Recall Sprite. But I'll add the
water first. Oh, ye need a bucket to move it....
It's easy to put the phone looking thing back later, it might be used in some
game to change textures of a character in game, perhaps to any of a rnge of
animations. 3:35 placed a blackwater and it fills great, but because it's water
it needs a partner bucket style item to pick it up again. Or... you could just
make it 'not water'. That's easier.
8:52am Friday, 12thJan2024,
How to go about adding the most important thing: Conversation trees with the
builtin/game/register has unknown item reg. Want to have you can drop the item
from inventory, because its texture is a basketball.
line 334:
core.register_item(":unknown", {
      type = "none",
description = "Unknown Item",
      inventory_image = "unknown_item.png",
      on_place = core.item_place,
      on_secondary_use = core.item_secondary_use,
      on_drop = core.item_drop,
```

minetest.register\_node("runes:pc\_1", {

```
diggable = true,
})
Change: on_place = [gotta put something that a normal item does here, ie, the
field gets an alternate function of the same category]
Well, I just took
      on_place = core.item_place,
      on_secondary_use = core.item_secondary_use,
      on_drop = core.item_drop,
out so I'll see if that works... not defined, it says, at the drop. So you just
have to hold the basketball. I should change the trash icon to a hoop.
image[3.15,3.35;0.8,0.8;"bin_"..math.random(1,2)..".png"] didn't work.
2:27pm Put this in where unknown is:
visual = "wielditem",
automatic_rotate = math.pi * 0.5 * 0.2 / size,
Then backup-
Didn't work. Backing up.
            drop = ":unknown"
                                  didn't work.
Type changed 'none' to 'fixed'. didn't work.
Type air didnt work. There's fencelike type. Trying type tool.
added physical = true,... requires type, set as node, didn't work.
Line 24 of builtin/item_entity.lua starts descriptors of the registration of
items. Use, try some with unknown_item.png :unknown in
builtin/game/register.lua, line 335.
2:04pm Sun
minetest.add_particle({
                   pos = bookshelf_pos,
                   velocity = \{x = x, y = 2 - y, z = z\}, acceleration = \{x = 0, y = -2.2, z = 0\},
                   expirationtime = 1,
                   size = 1.5,
                   glow = 5,
                   texture = "xdecor_glyph" .. random(1,18) .. ".png"
With the 20 celestial chinese glyphs. ????
...4:09pm, the moss is unmoveable now. don't know why. Blood's changed to
'blue_fray.png'.
Do mobs follow themsleves: ie, the inv item for them. ...Didn't work at all!
Should.
The moss is actually a big lawn on a golf course! When you throw something, the name ball for instance, it rolls along slowly decreasing in speed as long as
it's on the green world blocks. No such mechanic for the rock yet.
I think the only way forward at this point is to just read casually and maybe
pick up a few ideas. Probably best, in the interests of unity amongst the
minetest and minecraft community, to abandon the total wreck that the stone
circle has become and call it a success.
8pm Isoma says 'Und how is my little shlumpy wumpy?' but is supposed to say 'Just following orders boss'. It's Inokuin that's all about beka's welfare.
hmmm looks really random. Like, they say what they're supposed to, but the
shlumpy wumpy expression is ubiquitous. So I should remove it.
I realise now it's the calling of that inokuin that was buried because there was
no selection box. Just left it two blocks under. I have to dig im up. So it
works! Also suddenly able to pick up unknown items from default era..... Got im.
8:32pm He's invincible. Made em all can walk 1 speed run 5 speed too. Ruins are
in ruins.
6:27pm Tp should be by clicking. Where the interaction distance is defined,
change to greater range. Added 'clean' systemattically clearing nodes currently
labelled as unknown, but really anything not customised.
```

groups = {not\_in\_creative\_inventory=1},

6:57pm non custom nodes cleared and 'clear' to be cleared of identifyable blocks to be cleared, so there's no need to remove 'clear' from the mods folder, to be clear.

```
9:15am 16th
Diagonal skew slab with two edges shifted could make a nice corner.
10am just reduced to one page to see how it would feel not having the sense of
duty bound with the inventory choices. Should produce list of clearable items
for indexing in 'clear'. Just the characters, 3 runes on and off, the four
emblem corners, and a screwdriver (wrench). 13+6+4+1=24.
Might change the :unknown node texture to have some naturalistic look. yawn.
Putting the other 3 pages back: from temp. Stones folder and tool folder where I
renamed wrench.lua to init and the init, which links to individual in game item
registrations removed. If it stays it produces an error page which blocks
initialisation of the model environment, because of the docs being linked to no
longer being present in the minimal folder. Temp is a 'sibling' folder to
minimal. Only, I'd like to put 'name' back into the mob folder because then it's
beside the characters in the menu.
10:29am changing vsect to pyra in obj: move v .5.5.5 to 0.50... 10:46am it is
added, in sto2.lua. Half pyro, 0.50 to 000. done.10:55am.
11:00am next, the diagonal skewslab corner, or sku20.
(-0.5 \ 0.5 \ 0.5) \rightarrow (-0.5 \ 0.5 \ 0)
(0.5 \ 0.5 \ 0.5) \rightarrow (0.5 \ 0.5 \ 0)
(-0.5 \ 0 \ 0.5) -> (-0.5 \ 0.5 \ 0.5)
(0.5\ 0\ 0.5) \rightarrow (0.5\ 0.5\ 0.5)
11:40 done and addes lowhalf: roch.
Edging pyramid: (0 \ 0.5 \ 0) \rightarrow (0 \ 0.5 \ 0.5)
REVELATION: The trifracs' last two fracs are clear, and the firsts list the
vertices of each face, as indexed by the list of coordinates above, which
continues to index independently. So the first trifrac fracs go up to the number
of listed coords. Also, the order they are in per coded line (ie, face) is the
order of the vertices indicated by the 'vt' lines, which are grouped by vertex
number per face. Knowing this, I can rewrite pyra to have four faces as 'top'.
So pyre's done. 12 noon. Now to try adding an octahedron sometime in future,
hopefully if it's easy enough.12:26pm. vt is somewhat scaled for convenience.
for instance, a {r2 r3 r2 r3} quadrangle defined here by coord vertices in
clockwise direction about perimeter could translate as:
vt 1 0
vt 1 1
vt 0 1
even though the edges are different lengths, they transform into the unit square
without distortion of relative ratios found on the surface.
12:58pm Class! Octa added. Sides twice wide but otherwise grand.
0.3536 div by 8:
{0.0442, 0.0884, 0.1326, 0.1768,
0.2210, 0.2652, 0.3094, 0.3536}
1:19pm tidied up Octa.
1:39 The seconds in the trifracs must be the vts.
They're a bit hard to follow in diagsteps. I should tidy it up a bit. There's
just no need for repetition if one is listing vts.
2pm Starting on diagsteps_8.obj. Vertices done. Next is to prepare vts by
counting number of faces, and prepping trifracs. Drew 'diagsteps_8.png'...
10 faces -> 10 trifracs. Now the trifracs for octa had simple counting for the
second and third bits of them, and the first bits were just from a fairly
redundant index of repeated triangle transforms made normal: the vts were 4
times more than needed. I can go back and reduce them now if I like. But I've
already regnoded the diagsteps_8, so I had better finish this obj first.
The faces in order are {base small T: (1 2 5),
base larger T: (1 3 4),
left little square: (1 2 7 6),
```

front little square: (2 5 9 7),

```
top little T: (7 9 6),
top Big T: (10 11 12),
Diag lower rect: (5 3 8 9),
Diag upper rect: (6 8 11 10),
back: (1 4 12 10),
right: (3 4 12 11)}
vts: maybe the vts are for texture mapping. In this event it will be obvious
whenever I introduce a different texture. I think they will be too small, but I
don't care now. I'll have to halve them, etc, then.
2:40pm done. Looks good, now for the selection box.
3:09pm I think that reversing the order of vertex passge in face definition for
back face of diagsteps_8 in obj might change the current 'back face only'
texture seen as inv item.
Let's just change it from (1 4 12 10) to (4 1 10 12). Could also have tried
reversing the orientation of the normal in vn.
Well now there are two back (back and right) faces as inv texture but it's not
good enough. I'm just going to use pinta.
3:28pm Done. how about the other side?
3:44pm Vertices done in obj. Faces in order: {
Base big T: (1 2 3),
base lil T: (3 4 5),
front rect: (4 3 7 8),
diag lowr rect: (1 5 6 9),
diag upper rect: (9 7 12 10),
left diag lil rect: (5 4 8 6),
upper lil T: (8 7 6),
Upper Big T: (10 12 11),
back: (2 1 10 11),
Right: (3 2 11 12)}
```

Well it loaded but with triangles where there should be rectangles. Should I refine my basic increment approach to the seconds in the trifracs? Don't answer that, I have added a 4th vt that would complete a square in the first group. Perhaps the trifracs are all reading from the beginning of the vt index. 4:12pm Didn't work.

Another Approach is to use the half slope part of it and edit the other half to it... Changed the l/r names of the objs so the match. Only the back face has a triangle instead of a rect now. 4:20pm. I'll try rotating the seconds in the back face of diagsteps\_8r. (instead of 1 2 3 4 use 2 3 4 5, etc) didn'T work after one shift. I'm going to add another triangle. To cover the gap, like what the guy who gave us angled stairs did to angled\_stairs' back and right faces. But first I'll rotate the vertices. Went back to before I cycled the trifracs. Changed 6th tf to have another random tf: 9/4/7... 9 is too high. Found a 9 in the 5th and switched it to 1 which is below 9 in the sketch. Worked, but there's too many triagles on the diag face.

removed 9/4/4 from 4th. Stayin frosty.

There's two -x -z faces. Maybe three by appearances. I'll remove the two at 4th and 5th lines of f.

```
vt 0 0
vt 1 0
vt 1 1
vt 0 1
vt 0 0
vt 1 0
vt 1 1
vt 0 1
vn -0.7071 0 -0.7071
vn -0.7071 0 -0.7071
f 1/1/4 5/2/4 6/3/4
f 1/1/5 7/2/5 12/3/5 10/4/5
```

Actually this was a good approach. Taking it apart when there's some conflict, in this case, overlapping textures. But also triangles instead of rectangles.

```
I see there are two half coverings left. On diag and back.
Time to close it. Try again later.
minetest.register_node("stones:diagsteps_8r", {
      description = "Diagonal Half-N-Eighth Steps Right",
      paramtype = "light",
      inventory_image = "diagsteps_8r.png",
      paramtype2 = "facedir",
      tiles = {"rock.png"},
      groups = {cracky=3, oddly_breakable_by_hand=0},
      drop = "stones:diagsteps_8r",
      collision_box={type="fixed",fixed={
{-0.5,-0.5,-0.5, -0.4375,0.5,0.4375},
{-0.4375, -0.5, 0, 0.0625, 0.5, 0.4375},
{0.0625, 0, 0.0625, 0.125, 0.5, 0.4375},
{0.125, 0, 0.125, 0.1875, 0.5, 0.4375},
{0.1875, 0, 0.1875, 0.25, 0.5, 0.4375},
\{0.25, 0, 0.25, 0.3125, 0.5, 0.4375\},\
{0.3125, 0, 0.3125, 0.375, 0.5, 0.4375},
\{0.375, 0, 0.375, 0.4375, 0.5, 0.4375\},\
{0.4375, 0, 0.4375, 0.5, 0.5, 0.4375},
{-0.4375, -0.5, -0.4375, -0.375, 0.5, -0.375},
{-0.4375, -0.5, -0.375, -0.3125, 0.5, -0.3125},
\{-0.4375, -0.5, -0.3125, -0.25, 0.5, -0.25\},
{-0.4375, -0.5, -0.25, -0.1875, 0.5, -0.1875},
{-0.4375, -0.5, -0.1875, -0.125, 0.5, -0.125},
{-0.4375, -0.5, -0.125, -0.0625, 0.5, -0.0625},
{-0.4375, -0.5, -0.0625, 0, 0.5, 0},
{0.4375, -0.5, -0.4375, 0.5, 0, 0.4375},
{0.375, -0.5, -0.375, 0.4375, 0, 0.4375}
(0.3125,-0.5,-0.3125, 0.375,0,0.4375),
(0.25, -0.5, -0.25, 0.3125, 0, 0.4375),
{0.1875, -0.5, -0.1875, 0.25, 0, 0.4375},
{0.125, -0.5, -0.125, 0.1875, 0, 0.4375},
{0.0625, -0.5, -0.0625, 0.125, 0, 0.4375},
{-0.4375, -0.5, 0, 0.0625, 0, 0.4375},
{-0.5, -0.5, 0.4375, 0.5, 0.5, 0.5}}}
      selection_box={type="fixed",fixed={
\{-0.5, -0.5, -0.5, -0.4375, 0.5, 0.4375\},
{-0.4375, -0.5, 0, 0.0625, 0.5, 0.4375}, {0.0625, 0, 0.0625, 0.125, 0.5, 0.4375},
{0.125, 0, 0.125, 0.1875, 0.5, 0.4375}, {0.1875, 0, 0.1875, 0.25, 0.5, 0.4375},
\{0.25, 0, 0.25, 0.3125, 0.5, 0.4375\},\
{0.3125, 0, 0.3125, 0.375, 0.5, 0.4375},
\{0.375, 0, 0.375, 0.4375, 0.5, 0.4375\},\
\{0.4375, 0, 0.4375, 0.5, 0.5, 0.4375\},\
{-0.4375, -0.5, -0.4375, -0.375, 0.5, -0.375},
{-0.4375, -0.5, -0.375, -0.3125, 0.5, -0.3125}, 
{-0.4375, -0.5, -0.3125, -0.25, 0.5, -0.25},
{-0.4375, -0.5, -0.25, -0.1875, 0.5, -0.1875},
{-0.4375, -0.5, -0.1875, -0.125, 0.5, -0.125},
{-0.4375, -0.5, -0.125, -0.0625, 0.5, -0.0625}, 
{-0.4375, -0.5, -0.0625, 0, 0.5, 0},
{0.4375,-0.5,-0.4375, 0.5,0,0.4375},
{0.375, -0.5, -0.375, 0.4375, 0, 0.4375},
\{0.3125, -0.5, -0.3125, 0.375, 0, 0.4375\},
{0.25, -0.5, -0.25, 0.3125, 0, 0.4375},
{0.1875, -0.5, -0.1875, 0.25, 0, 0.4375},
{0.125, -0.5, -0.125, 0.1875, 0, 0.4375},
{0.0625, -0.5, -0.0625, 0.125, 0, 0.4375},
{-0.4375,-0.5,0, 0.0625,0,0.4375},
```

2:33am 17/Jan Added Joey as Jel, because I had a Dream where... It's hard to explain in these terms, surrounded by this language, but...

Am I following the branch of a tree? And below is it a guy? But before, it's way way better, I go down these wide steps, we're all free. Like, who's there, with me? Dunno anymore, but it's easy to explain away these fun dreams yet when you experience them, it's magic. alex said her dreams are real. That's a normal way of describing it.

added reo, the magpie. Color's off on diagsteps, mabye if redo just try attach slab to diagstep corner. ETA 2 hrs.

11:04pm 17th Jan.

5:59pm Added Shallow Arch.

10:48pm Trifracs for asect have repetition but are elucidating in terms of clearing the fog around what the trifracs represent piecemeal: first is vertex, second is transformed vertex, third is index for face itself. The numbers represent merely the position of each in the list for the first two. Then the normals are respective to the faces. This should be simple. With the normals, the transformed vertex coordinates work. The repetition is harmless if it helps one to read from the model. If it breaks the code into bitesized chunks of information regarding the model. Here, with asect.obj

[usr/share/games/minetest/games/minimal/mods/stones], the vertices, vts and trifracs have redundancy, and I can simplify it to about 3/5 of the file's length, but I'd rather do it later if I do, and increase the resolution of the nodebox. I just want to play with the vts: how does changing the triangle coordinates change the model? What relation can be drawn from the vt and its corresponding vector trace?

To understand this little thing, I note some quirks:

- 1) The model must be rotated from its default param2=0, ninety degrees clockwise on the ground, or you gotta look In negative X, or West, to align with the obj file's vector coordinates, taken as x,y,z. That is, the model is rotated.... yikes this is tough... a quarter turn anticlockwise from its obj file's coordinates. Don't know why.
- 2) Next, you'd think the vectors of the first trifrac, which is a triangle tilted to fill half of a slope that goes between opposite edges, and the top left corner, would be listed in the same order as the first components of the trifracs in the trifrac line corresponding to the face in question, but they don't.
- 3) Not only that, but the triangle is upper right in the vts and upper left in the trifracs. Should we look at the triangle from inside the nodebox when calculating the vts? Perhaps so, 'along the normal', which is oriented outwards from the nodebox to represent the direction of N, the normal force experienced by a body in contact with the surfacein physics. That would resolve 2) and 3). But then, looking at bottom, the trifracs go from the lower left anticlockwise, and the trifracs go from the top right, also clockwise, in a quadrangle. I say quadrangle rather than square because it is assumed that ratios are normalised for vts, that is, simplified to units or half units or doubles as I've seen. Anyway, they are 180 degrees off.

The first vts read from the trifracs associated with them if the coordinates with which the vts are read are identified with a reference frame that has been rotated 90 degrees anticlockwise from the reference frame with which the initial vertices are read.

I know the first trifrac corresponds to the... Actually, I have just seen that the first trifrac corresponds to the other triangle on the node, the one pointing to the left, and I'm thinking the coordinates might be ... yes, x is reversed, while z is the same. That is why I didn't notice anything unusual with the octahedron, it is symmetric. This way, the vts and trifracs match. There is also the line 's 1'. I wonder does that have something to do with the coordinates.

To recap, vertices read on node as though x direction is reversed in world, or,

'where the node lives'. Hmm, expressed like a sculptor.

But for bottom then, trifracs are 180 off. Unless, perhaps, you read the box as though the bottom is unfolded out and up to ground plane from the front edge. I hypothesise that the whole thing is undeveloped out like a box would be node to form the sign of a cross with the top as centre.

Right trifracs removed, and right node face in world also removed. This side's vts and trifracs correspond exactly as expected if vts read as the projection of the right face when viewed from a standing position to the right of the node, or, for the undeveloped box interpretation, as though the box's right side is folded out and towards a viewer around the near edge, with the viewer standing facing the front of the box. This is so far conchordand with the box being undeveloped into the sign of a cross, rear face notwithstanding, having only the front face as it is on the developed nodebox when whole. The left vts and trifracs conform to this also.

I don't know what 'l 8 10' after bottom, 'l 15 18' after left, and 'l 22 23, l 19 23' after back means.

For back, vt trifrac correspondance is fine if vts read on back face as though it were unmoved by any undevelopment, just like front I presume. I will check. It goes clockwise from the bottom left, viewed through the node.

Sorry, The vertices for back face should be read looking in at the box, not through, for the vts, and they correspond therefore as though the back face WERE undeveloped on a cross with the fornt unmoving. Whether it undevelops right or left will produce the same result, but not up or down. Front face conforms.

To recap, to read the vts, undevelop the nodebox around the front face, with preference to horizontal wrapping for the back face. The trifracs are to be read as though the x axis were reversed. The vns follow this convention also.

I removed the mysterious 'l's and it does not seem to change anything in the world. 12:16am

8:17am 18/Jan/2024

This morning I am redoing diagsteps\_81, the side attache for diagonal and minimal (R2 width) steps.

9:12am redone, but didn't work, the textures are all distorted as though t'wer stretched into corners.

I'll see how faces correspond by selectively removing them. bottom corner taken out. I want to get the lighting to match the others. changed s off to s 1 but can't tell a difference.

I've noticed they're all the SAME broken texture. Out of  $\{xz\} = [\{00\}, \{01\}, \{11\}, \{10\}]$ , just  $[\{00\}, \{01\}, \{10\}]$  have a grid pattern going up diagonally from bottom right to top left, that is  $\{10\}$  to  $\{01\}$ , the other half of the quadrangle is a vertical swath from the triangle's upper long side, with vertical bars given the colors of the diagonal.

9:57am Opening diagsteps.obj to cut more naturally. But it's overheating so I'll have to take a break for half an hour.

10:44am making a diagstep\_2... It might be more efficient, if a little less difficult to grasp, to simply map the vts as a template on which is held the union of possible vertex coordinates as read from the undevelopment. It would save scrolling, the numbers would stay low. Diagsteps conforms to my understanding, now I'll cut it by moving two vertices, and the corresponding vts: 1 and 4, say. [see diagstep\_2.png]. 11:11am done. Let's see. Texture is fine this time. 11:23am Selection box done.

11:53am Did collage of old diagstep sketches and dumped them in 'Outgoing' folder which acts as a kind of bin. Made new sketch with planned relocation and addition of vectors. Added the 11th vector and moved the 7th one in diagsteps.obj, which is changing to a new diagsteps\_8l.obj, with the previous one renamed diagsteps\_8l\_x.obj for archiving into the bin.

12:34pm Maybe the faces as listed can correspond to a texture list of the same size in regnodes.12:55pm Done, it's perfect this time.

1:01pm ... 1:54pm Done. Didn't work, and I suspect it was my attempt at using a non-concave face. SPlitting.Whoops, won't do without the vns either. Bit jagged... Fixed.

2:20pm Moving on to spiral staircase project.

 $<sup>1-(\</sup>sqrt{2}-1)\times(3/\sqrt{2}) \sim 0.1213$ 

```
1-(\sqrt{2}-1)\times(3/(2\times\sqrt{2})) \sim 0.5607
(\sqrt{2}-1)\times(3/\sqrt{2}) \sim 0.8787
spirdiag sketch done.
3:36pm spirdiag_r.obj done.
Halfway through selection box I'm putting a blue planet in the Blackpool.
Animation, slow. nope. not today, someday, maybe. done. Selection box done.
Tidied up. 4:39
But the top corner of it has come up over the column corner.4:41 fixed.
It must be facing the wrong way, The little top triangle, that's why the color's
darker. 4:43pm fixed. Perfect... but no inv img. 4:44pm fixed, by removing bit
of nodereg for 'inventory_images'. Fixed bit o skew.
7:50am 19/Jan
Ready for a bit of work?
8:06am
The coords for pillar are just ±0.3536, that's vectors and the normals will be
depending on the big based triangle with side lengths 1/\sqrt{2}, and two equal
smaller ones, the sides of a regular octagon with long diameter 1. I suppose
it's the square root of the sum of the squares of 1/2\sqrt{2}, and (1/2)-1/2\sqrt{2}.
(1/2)-1/2\sqrt{2} = (1-1/\sqrt{2})(1/2)
~ (1-0.7071)/2 that's 0.2929/2 about 0.1465
1/2\sqrt{2} \sim 0.3536
\sqrt{((0.1465)^2+(0.3536)^2)} \sim 0.3827
Won't use it, but it's good to know.
8:16am starting object file for column. Actually it will be relevant when giving
the vts for the column's sides, that 0.3827. 8:37
0.1465/0.3827 = 0.3828 Huh, it's the denominator
0.3536/0.3827 = 0.924
9:00am spicol_8.obj done.
Seen it in game, it looks mighty fine but it's only half high.
(Spirside_r should be two quarterslabs sharing an edge.)
Spirsteps.png done. point 5 extends past negative 0.5 in x direction
(1/2)(1-1/\sqrt{2})=1/2-0.7071/2 = 0.5-0.3536=0.1464
Then the z coords of vertex numbers 5 and 13 are -(0.5-0.1464) and (0.5-1464)
resp. and that's -0.3536 and 0.3536.
Then we have 1/\sqrt{2} - 1/2 = 0.7071-0.5=0.2021, the lengths of |35|, |8 10|, |12 13|
and |15 18|.
And the column sides as before are 0.3827, and that's the lengths of |25|, |7
10|, |7 13|, and |16 18|.
0.2021+0.3827=0.5848
Oops, made them identical slabquarts but they're mirror images, barring textures
10:21am. That is a redo of faces 10, 12, 9 and 11.just the seconds. 9 done
10:23. just 9 and 11. 10:25 done. also 2, 17.
\sqrt{((0.1464)^2+(0.3536)^2)} = 0.3827 that's the hypoteneuse for #9s face. The normal
of it was calculated above. It's mad that one of the normal's coordinates was
the same as one of the right sides for which the hypoteneuse was obtained. I
suspect its a special value... 10:43am done, but few patches on f16,f1, and f14.
Looks like two textures clash on f15 also. 10:47am Done.
But the selection boxes are next for the spircol and the spirstax_r.
11:15am done. Looks good, with these three you get the rise of the spiral, but
three more are planned for an exit off the side, a base side, and a block for a
wall off the column. And also a stepless cornerfill for the spirdiag.
7:42pm did spirout. 8:12pm did Spircod. 8:46 did spirjoin.
4:33pm 20/Jan/2024
spirdiag midp 0.7929 from col. The long filler is one the (-x,z) corner, the r
to I switch is like switching x to -z and z to -x, how goes the transf in
nodereg? This transformation would invert the order of pos 1 and pos 2 in the
selection box list, but also reflect the structure to switch the handedness of
the spirdiag. I would be rewriting each line backwards exactly and changing the
signs, for the volumes where y is bottom to top, and otherwise keeping y
unchanged.
```

Done, but skews occurred because of mis-partitioning to ease counting into group of nine instead of ten with the vts. 6:00pm fixed. Why don't top faces show in inventory icon? oriented other way around. Quick sign perm for  $f\{11,12,13\}$ . Whoops, did the wrong side and the both of em were darkened. 6:05pm done. Now to do the same thing for the other two: spirstax and spirout... 7:06pm spirstax\_l.obj done. Faces #s 14, 17, 18 textures darkened, skewed and missing.7:33pm all fixed, just one more, spirout\_l.7:47pm spirout\_l.png done. 8:38pm Done, but game didn't load, and this issue may relate to the vts. trying to compare right and left for discrepencies. obj and png. There are actually less vts for the spirout\_r, and I chalk it down to some loose texturing, and doubt it's the want of vts doing the error. I'm increasing one of the vts in right to see if it errors out with a norm that's over unit mag. nope. Removing one. Texture's gone wonky, but loaded anyway, and that's because only one of four in a quadrangle were tampered, three vts will load skewed on a quadrangle. Removing another. Well it still loaded. Removing all of them but 1. STILL loaded but with textures built from a single line of stone.png. Removing all. Didn't load. All back. It's not a perfect texture, but it'll do. I can't see any syntactical difference between the two. A real Jolly Roger. Without the obj for left it loads. I'll check the selection box anyway.

May have to just sort of redo it. Just a quick look over it again... (9:01pm) See if all the faces were oriented correctly. No, fixing... First was using two of the wrong vertices...f{2 1 6} should be f{2 1 3}. Fixed. Ok Trying another load. Nope. What if I moved the first face, which is sort of more of a back one than a left one, to the end of the 'round the block' undeveloping... But not really, don't think order matters anyway, and they are the same result. 9:15pm Selection Box is accurate. Item is in inventory. Just obj file causes crash on loading. One known cause for such crashes is no vts in the obj. Suspect Syntax error, but can't find any. Texture orientation and missing indices have not been known to cause crash on load. spirout\_r, which is extremely similar to spirout\_l, loads fine and everything is handy dandy. I suppose I could change all the texture mapping vts to a square and relist the seconds of the trifracs ETA 8mins.9:28pm no change, still doesn't load. I guess I'll put them back will I?Done.

My guess is that the obj file is sound. I'm switching anyway to non-mesh type. 9:37pm That'll work fine. It's a wrap.

10:48pm added dice, plot and shrub. That fills the fifth page. Backed up. 23/01 7:42pm

Should find CORE definitions and add a statbar. Maya 7.0 free, useable. Uploaded minimal to penny's dropbox and linked to it in minetest fourms as 'flowingpoint's minimal' under floatingpoint, but it' probably intermitently accessible at best, and that's if anyone is even interested, and chooses to look for it beyond the ads, and then they'd have to give minimal a go if they'd never done it before, and I'm sure they'd get a lot out of the experience, but they wouldn't exactly feel 'at home' there the way I do in 'stone circle'! Unless obviously they make it home by building what they love to see in concrete visual existential modity.

7:37pm 24/jan/2024 Added isoka, isocol, iso54, the pentagon set. want to check if animations run over mesh types. temporarily changed stones:vr (vertex removed) to have tiles of a rune to see if it does what the rune does. Good, it does. Changing back. Fixed interlacing of orbit of the isoka. F#9 req texture rotation. 8:21 sorted. 8:46pm I could try rotating the vts for 'upper' by selecting the same sets. To add:

tiles = {{name = "rock\_1x24.png^opaq\_1x24.png^star\_1x24.png", animation = {type = "vertical\_frames", length = 5.0}}}, I'm aware different portions of the star can be set for each surface so that if an animation runs you can get different effects on each face, running the one animation strip. But I'm leaving it. Fixed a skew on last face of iso54. The faces of col and 54 all map the same regardless of the number of textures listed.9:35pm added animation. Could rotate the animations' vts. Opposite sides can be similar. Usable combinations:

Original: {5 1 3, 5 9 1, 5 7 9},
Not sure... I'll try just one of them.
face #10, {3 9 1, 3 7 9, 3 5 7}
Hmm almost, middle one is fine. It'll work. Unreal!

```
I'll rotate the side ones.
face#11 {1 3 5, 1 5 7, 1 7 9},
face#12 {9 1 3, 9 3 5, 9 5 7}, face#8 {7 9 1, 7 1 3, 7 3 5}
face#\{7,3,4,5\} same
Undid and rearranging 9:49pm
First face original
      {5 1 3, 5 9 1, 5 7 9}
#9 {1 3 5, 1 5 7, 1 7 9},
#10 {7 9 1, 7 1 3, 7 3 5}
#11 {3 9 1, 3 7 9, 3 5 7},
#12 {9 1 3, 9 3 5, 9 5 7}
And same order for \#\{5,6,7,3,4\}
Now onto isokar with r for random.
the mixing as follows:
{L,R}
1: Right - left, Top - right
2: L L - left, Left - right
3: R R - left, L L - right
4: Top - left, R R - right
5: Left same, L L - right
6: Right - left, Top - right
7: Left same, R R - right
8: R R - left, Left - right
9: L L - left, Right same
10: Right - left, Right same
Don't have to do it today, it's an option.
The triples are elements of each set. They list Right, Centre and Left upright
star segments. now going through each face, applying the permutations,
[Error below]
10:26 made an error in the first permutation. The rights have a jump of -4mod10
in the first element triple. The lefts are consistently +2.
#3: {3 9 1, 3 7 9, 3 5 7} - {5 1 3, 3 7 9, 1 3 9}
#4: {9 5 7, 9 3 5, 9 1 3} - {3 9 1, 9 3 5, 1 3 5}
#5: {5 1 3, 5 9 1, 5 7 9} - {1 7 9, 5 9 1, 9 1 3}
#6: {1 7 9, 1 5 7, 1 3 5} - {9 5 7, 1 5 7, 9 1 3}
#7: {7 3 5, 7 1 3, 7 9 1} - {9 3 1, 7 1 3, 7 9 1}
#8: {5 1 3, 5 9 1, 5 7 9} - {7 3 5, 5 9 1, 1 3 5}
#9: {1 7 9, 1 5 7, 1 3 5} - {3 7 5, 1 5 7, 1 3 5}
#10: \{7\ 3\ 5,\ 7\ 1\ 3,\ 7\ 9\ 1\} - \{1\ 7\ 9,\ 7\ 1\ 3,\ 1\ 3\ 5\}
#11: {3 9 1, 3 7 9, 3 5 7} - {3 9 1, 3 7 9, 5 7 9}
#12: {9 5 7, 9 3 5, 9 1 3} - {9 5 7, 9 3 5, 5 7 9}
Error:#3: {3 9 1, 3 7 9, 3 5 7} - {5 1 3, 3 7 9, 1 3 9}
#4: {9 1 3, 9 3 5, } - {9 5 7, 9 3 5, 5 1 3}
#5: {5 1 3, 5 9 1, 5 7 9} - {1 7 9, 5 9 1, 9 1 3}
#6: {1 3 5, 1 5 7, } - {9 5 7, 1 5 7, 9 1 3}
#7: {7 9 1, 7 1 3, 7 3 5} - {3 9 1, 7 1 3, 7 3 5}
#8: {5 1 3, 5 9 1, 5 7 9} - {7 3 5, 5 9 1, 1 3 5}
#9: {1 3 5, 1 5 7, } - {
#10: {7 9 1, 7 1 3,} - {
#11: {3 9 1, 3 7 9, 3 5 7} - {
#12: {9 1 3, 9 3 5, } - {
a lot of repetition so I'll swap #6 with #9, and rotate a few lefts so they
don't repeat so much, in order.. Rights as well, just so there's two of each,
some still aren't even following form mod 10.
#3: {3 9 1, 3 7 9, 3 5 7} - {5 1 3, 3 7 9, 9 1 3}
#4: {9 5 7, 9 3 5, 9 1 3} - {3 9 1, 9 3 5, 1 3 5}
#5: {5 1 3, 5 9 1, 5 7 9} - {1 7 9, 5 9 1, 5 7 9}
#6: {1 7 9, 1 5 7, 1 3 5} - {7 3 5, 1 5 7, 3 5 7}
```

```
#7: {7 3 5, 7 1 3, 7 9 1} - {3 9 1, 7 1 3, 7 9 1} #8: {5 1 3, 5 9 1, 5 7 9} - {7 3 5, 5 9 1, 1 3 5} #9: {1 7 9, 1 5 7, 1 3 5} - {9 5 7, 1 5 7, 9 1 3}
#10: {7 3 5, 7 1 3, 7 9 1} - {1 7 9, 7 1 3, 7 9 1}
#11: {3 9 1, 3 7 9, 3 5 7} - {3 9 1, 3 7 9, 3 5 7}
#12: \{957, 935, 913\} - \{957, 935, 579\}
That's enough of that. Now the obj...
10:50pm Done. Let's see. #7 messed up.
#8,9,10,11,12 all seem to have left and right switched. Possibly because I mixed
up the uppers and lowers. Yep they go left to right.
#8: {5 1 3, 5 9 1, 5 7 9} - {1 3 5, 5 9 1, 7 3 5 }
#9: {1 7 9, 1 5 7, 1 3 5} - { 9 1 3, 1 5 7, 9 5 7}
#10: {7 3 5, 7 1 3, 7 9 1} - {7 9 1, 7 1 3, 1 7 9}
#11: {3 9 1, 3 7 9, 3 5 7} - { 3 5 7, 3 7 9, 3 9 1}
#12: {9 5 7, 9 3 5, 9 1 3} - { 5 7 9, 9 3 5, 9 5 7}
11:07pm face 9 needs attention: done.
Well that was a fun way to spend an entire day, A glowing fiery random looking
icosahedral orb sitting on a pedestal that seems to have risen out of the rock
surface.
8:01am 25/j
Replaced cranck_anylength.png with the modified green glowing crack. Fixed
redundancies in octa. Gotta fix mesh for spirout_l.
11:28am Looking at spirout's surfaces. The png has:
           2:6 7 14 13
1:1 2 8 5
                               3:7 10 16 14
                  5:2 4 11 8
4:10 8 15 16
                                     6:4 3 9 11
7:8 5 12 15
                  8:3 1 5 9
                                     9:5 6 13 12
                  11:15 12 13
10:15 13 14
                                     12:15 14 16
            14:9 8 11
                               15:3 2 1
                                           16:3 4 2
13:9 5 8
                        19:8 10 7
            18:8 7 6
Checking obj...orientations match. Copied vts to separate mousepad doc so the
index is easier to read. 11:46am checked the faces and the vts correspond, and
are precise. On to vns, the real suspect. There are 19. That's ok. THere should
be 7 skewed off axes but only 6 vns deviate from axes, so there's the problem.
Slant faces are: \{1,3,4,5,6,7\} I'm mistaken, there is the correct number.
But look, first face '0.4472 0.0000 0.8944' is a bit too z direction: it's R52
but to the X. Fixed 12pm but wont load still. Double checking vectors.#7 is
supposed to be neg z, fixing. No, it is, I was reading #6. Damn, it's all right.
There just happens to be 19 vts, but it's not generally the same as the number
of faces. Engine just shuts down loading it. Fluffed up the decimal places to 4
for EVERY vn. Changed s off to s 1. I'm repeating myself. No, still something
wrong with spirout_l.obj itself, not the selection box, not objs in general,
just this one.
1:21pm Tidied isocol.
3:03pm Tidied Isokar and iso54. Changed light to lvl14 for isokar and dice. Want
to add the '3' block.
3:21pm Though I really want to get started on the '3' block, I have started
getting into actually 'playing' with the blocks, and am looking forward to
'looking' at something like a 'room'. Fixing a texture for spircod the corner
diagonal for the spiral staircase set. I sound like a salesman.
Spirstax_r has triangle instead of quadrangle under upper halfslab.4:08pm
Spirstax_l missing triangle on lower quarter slab end opposite column side.
4:51pm done a garden, wanna make octa glow blue. 4:56pm done. 5:16pm spirstax_l
fixed.
1:17am 26/Jan/2024 adding estamp....1:55am added estamp- it's a little red star
sticker!.
7:44am Taking sounds out of sprites.
      sounds = {random= "whoops"},
      sounds = {random= "uhimlsw"},
      sounds = {random= "fbeo"},
      sounds = {random= "itclown"},
      sounds = {random= "lojicfi"},
      sounds = {random= "iicii"},
      sounds = {random= "jalgohas"},
      sounds = {random= "iagccccm"},
```

```
sounds = {random= "tgoy"},
sounds = {random= "jfob"},
sounds = {random= "owyltbapomg"},
sounds = {random= "salcwbi"},
sounds = {random= "latbtaacn"},
sounds = {random= "idwidoc"},}
```

Done, opened new sto3.lua, for 2 spircod corner joiners. 10:12am loaded but back chip seems missing, seems like upper and lower side vectors were put together by accident. Checking vectors in obj. Sure enough, minus was missing in reflected last ones.10:13am. Done, looks good.

2:31pm adding vns to obj.2:40pm obj done, it's pretty fine. 3:40pm selection box chiperoo now.

6:13pm Playing, I'm thinking, I am not stressing myself over building, I'm looking for good questions, and maybe you don't have a set method, it's a stumble at first until you start leaving things behind, then you start cherishing things you have a bit, WHEN you can leave them. Then there's the things you pick up without noticing, like the vizier of POP. Was it a top down approach? Knowing an ending, looking back down to what could have been proper. Turning from a prize? Is that building? Having something to put in a house, but going out to the dirt anyway, away from houses... Do I want to prattle or battle? Why would there be a bridge up there? Who plans that? The idea was that anything goes and if a stable idea forms, like the star shaped wall, ball, and stamp, they are put together with more than whim, they are cooperative in some way. The way you look at them changes. Like a family, then there's the circle of stones in the middle, mostly irrepriseable. Go that way to insurmountable failure. That's the beginning. Yeah, right. That's 8 stones, offering an improvement on four stones. Taking your place. So let's stay upright, hardy, and sociable.

6:24pm Wanted to make blackpool circular, but... nah. By the way, You can ALWAYS FLY, and ALWAYS have a creative menu, that DOES NOT CHANGE. It's so cold here I can see my breath. We're up to 9/24 of the 6th page. They were good additions, and there's half a dozen on the table for next week. A good one is the '8' cell. stacks well, coming soon, like the estruk, starstruck wall. Want to thin out the sprites' selboxes.

9:44pm Tuesday 2nd March 2024Examined Order Garden as Space Battleship, with interpretations: Top Arch as portal Captain Room Entry, Blue Octahedron as Water source Node, Dodecahedron as Engine or Nuke, Red Star on Spiral as gunnery vantage point, bare 4 corner standing stone could hold special sundial, compass, or BIGREDBUTTON. Page 6 has 2 emtpy spaces. Thinking of adding random looking grass frays above the Brush node and not the dual brushrock ones, and a rush node. Need to reduce itemfree node smash to close to nil. Want to make the 'Hui' rune functional as respawn point, or try again to have toggling glow effects. They were meant to be simple portals. 9:58pmIt is sinking.Looking over the surrounding levels, going down in steps of stories, like a crane peicing together the libraric Hallways and gardens of Babel. Looking to the stars for inspiration. Taking what is needed sometimes by question or argument with steady pluck from over the edge.10/4/24 3:54pm Work hours are very short, if any. Sent links: wall.pdf and drinkdamnation.pdf to two local villagers and Day of Jackal.mp4 to Suong, with bread plan set by Randark's 10 electrums.11/04/24 7:23pmHmm, feeling drained, sure I sweated getting my bed rotated, the curtains changed. Made record 41 seconds remaining for 'All you have to do is return these cars to their owners. Do it quick, and don't smash em up.' mission. Tamed the Champion Wolf in WO. Right let's get creating again. A short exercise. In Minetest again, there should be an animated dial that extends through four adjacent tiles, flat on the bottom of its box. Starting the 1x16 png. Since I've not done it before, I'll go with the regular size of tile. Then scale up by 2. Have done 12 points of a clockface, checking mbdx animation to double check frame count. 7:37pm.7:47pm 12 frames done.7:57pm Done, but it's only one tile. Want four intersecting tiles. Or 2.8:17pm Tweaking durations, 64 has a jump. Yikes, so does 24. Another jump. I've set it to 44=704/16. Jumps. should be around 704/12=58. Set to 60. 60.512/apr/24 4:47pm Shifted dial half unit to bottom left, but turns out the texture tesselates, so going to change animation and resize to fit as part of set of four on the time column. Making four dials, moving them from creative to runes. 4:59pm made the directioned regnodes in runes. 5:14pm Four directionals added. They overlap fine, as concentric diamond perimeters of four colors: red, blue, green, dark grey.17/Apr/24 5:15pm Thought this morning on a DM walk of the color wheels harbouring unifying fragments of an circumcircling bubble network. Each nodebox simply containing offset rectangles. If the rings were embossed outward, grooved outward to match a texture with a plain color background beyond the ring figure, on the central dial structure, but every other structure in the periphery was a solid cube minus the ring, it would also be capable of satisfying this bubble wall requirement, just the wall nodes would have gaps like the leaves do already in main minetest.18/Apr 2:05pm Estruck not star shaped enough: two vectors need shifting a little bit. But I'm kinda on holiday. Today I ventured into the abandoned house at the end of our street and found a moon ball, matching the ones delivered today along with loads of ...21/Apr 10:28am v1:->yz->={(-0.20991, -0.10073), (0, -0.25324)  $l = \sqrt{((-0.20991)^2 + (-0.25324 + -0.10073)^2)}$  OR, each coordinate scaled seperately by  $\phi:0.20991 \times \phi = 0.20991 \times 1.618 = 0.33960.15249$  $x \phi = 0.2467v = \{(-0.20991, -0.10073), (0.3396, 0.2467)\} = \{\pm 0.12969, 0.14597\}$ Chnging  $\pm 0.12973$ , -0.40574 to that isn't right. Should be  $\{\pm 0.12969$ ,  $-0.34743\}$ . Wierd, changing the coordinates, funnily enough, doesn't change the starhole noticeably, after resetting and even renaming the obj file to 'estrucko.obj' but not the nodereg still presents the model in sim 11:10am It's cos I was testing in TJWIDE, but editing the minimal.22/Apr/24 Monday 7:43amMade D4.png, the master map of the four concentric unfinished columnar disc combination as crosshair node combination, or fcucdcacn, or 'fudan'. I wonder should I use mesh. What it should be is the selection and collission box is the corner.Lost the red disc now, having reduced the boxes to cover only the area on the pillar, and only one square, because it has been cropped out doing this. Perhaps a pixel by pixel approach is cleanest? It's {32,28,24,20} pixels for them. That's doable. 8:15am One pixel done on red.9:04am... 10:43am Corrected missing decimal point in two or three locations following fudan pixel entries, which were causing the world to freeze on load. 10:49am renamed {dur,dul,dbl,dbr} to {Our,Oul,Obl,Obr}. This was so they'd appear together in the creative hud, but can be seen as signifying the origin as being essentially the natural crosshair at the centre of the concentric diamonds on the garden's token, a true node. 11:00am number of pixels per ring: {20,24,28,32}, so I'll make the animations

have that many frames each. 11:00 ur and br done but Thinkpad overheated and had to blink back. Since the orbital periods of the four inner planets of our solar system are {88,225,365,687} days, I'll just let the frame rate match, setting earth's to '1'. Mercury's is 88/365 of whatever earth is, but the ring ratio is 20:28 as well, so it's the product of those two fractions: 440/2555. Venus is  $225/365 \times 24:28 = 1350/2555$ , Mars is 687/365 and 8:7 so 5496/2555. 11:44am done. Well it's a bit fast so I'm setting it to 12 times that. Looks fine, though of course it jumps.----RINGWORLD INTERLUDE----Move a piece of one color onto another of your pieces to form a two piece stack, and have the one with the lowest Att and Def total on top. This stack cannot be taken by a single adjacent opponent's piece, nor can it be jumped..(?)[sk] The top piece then moves off the stack first. ~/~ Move your piece to an empty adjacent grey tile and turn it over. Do this for 5 grey tiles, with a piece of each color, so that a group of connected grey tiles is covered. Turn the lava monster upside down, if it is still in the centre of the map. It is now a bridge. When a piece on the grey group is flipped back and moved to an adjacent color tile of its element, the lava monster is flipped back so that its symbol shows again and it is placed on one of the lava tiles adjacent to the grey group that has broken. It is now in [≠that pl the opponent's control and moves one tile at a time around the lava ring≠] When the L.M., if moved to one of the lava tiles that are a bit off the ringed path, is removed from the control of the player that controlled it, and behaves as it did when it was in the centre, except that it doesn't form a bridge. If a grey group is covered again, it'll be put next to one that disbands though.. Maybe should be flipped at beginning and function as bridge until city is filled, then circle ring... randomly even. Or: number of city dwellers [≠are≠] (effects but subtracts with number in ring adding to step size.) steps size of L.M. but number of steps is something else... like a choice in range below die roll. / Earth Metal Wood Water Fire. (Arrows) Number of moves roll of single die? Tetrahedral? л When a piece moves to adjacent [≠an≠] opponent's [≠tile≠] pieces of lower [≠attack≠] defend point, the ones with lower points wait for the [≠big≠] one to go before going anywhere. It would be better if any animal could claim dominance in the case of a hierarchy. Not the best! But: Higher defense grounds, but if a stack is also adjacent,  $[\neq no issue \neq]$  no effect on the grounded. The stack can belong to either player for [HALT IMMUNITY] A stack on Yellow or BLACK has twice the range (18 tile area).. #1 just effects one animal (the adjacent) #2 affects both in relationship #3 Penny says [≠Chain≠] add a road to the tower, make it more interesting (harder).. If all intermediate tiles are occupied, a piece can't take the path. If only some are, it can. But with yellow and black pieces, a single or double tile block will do (one on either side of an inter tile path) / If a piece with higher [≠(or equal)⇒≠] attack goes adjacent to a player's piece, the player must jump it if [≠possible≠ pus≠] there's a same color tile [≠Facj≠] exactly the other side of it. This breks a stack first. It does not override the defense [≠ground≠] halt rule. The one with LOWER attack jumps..[ $\neq$  To start off, all the animals are flipped and around the edge. Take turns either flipping them or moving them. Every player picks a grey group (it's chosen when the first piece enters it)  $[\neq An \neq]$   $[\neq The piece then bel \neq]$  Move a free piece to your grey group to claim it.  $\neq$ ].. [sk] (It's not really claimed (nothing in the ring is claimed, but you get something  $[\neq for \neq]$  out of completing it  $[\neq maybe \neq]$ ) When a piece leaves the island it's yours. That's your point system, is it? Well, there nay be progression in terms of TOTAL AD, (increasing) or just one of each color?.. But  $[\neq dn \ t\neq]$  the attack must be higher than the wolf's for it to jump a skunk. (wolf). 3,4, or 5. Defense not applied. / A jump is only necessary on the same move as a placement adjacent (of one with lower attack than the one that was already there in its position, and [≠eal≠] in this case higher defense does not ground.) Gaining points by multiple groundings is counted by the number of pieces NEWLY grounded by it following the move, ignoring pieces freed by no longer having the moved pieces next to them.. You can't form a stack with a jump but you can jump out of a stack.. Points a player earns relate to the increase in some relationship between the A&D totals of connected or adjacent pieces before and after a move or set of moved following a die roll dictating the nuber of moves a player makes. A player may support a color, allowing for non-zero-sum tallying, but loops must be cleverly avoided with block rewards in the category of HALT and STACK IMMUNITIES. For instance, completing a grey group,

halting more than one piece (in one go), jumping more than one piece (in one go), creating a stack, or creating a small six piece ring (empty centre) could increase points while disbanding a grey group, [≠freeing a piece≠] adding a piece to the game, going adjacent to (with L.M. or with another piece) the Lava Monster, breaking a stack would remove a point.. Number requirement (N.R.)  $\Delta$ Once a piece crosses the lava ring it is playable by anyone, but before that remains owned by a player. OR  $\Delta$  A piece remains owned for n moves.. Pieces try to get to the opposite ports ( $\Rightarrow$ get a point), unless they enter the ring. If we use cards, they are given up upon ring entry. Pieces don't go backwards when they have cards, ie. not closer to port of origin. Ports are 5 color edges, of which there are six.. POINT SYSTEM VERY LOOSE! / The player may choose not to enter a city, and pass the lava ring, but must  $[\neq be \neq]$  not be going back then. The piece that ENTERS A CITY can't leave until it is completed, and either disban with leaving, or leaves after it has disbanded. When the city is empty again, it must be visited by the L.M. to begin building again. The L.M. simply has to go next to a grey tile. The L.M. moves the number of tiles that there are pieces in the interior of the ring. If there are none in it, the L.M. goes immediately to the nearest [≠not≠] non ring pathed red tile. Pieces in cities don't count towards the L.M.'s speed, but subtract from it. It cannot be negative, just zero. It moves every turn, if non-zero.. Flipside repres'ts 'city of' animal piece, for ruin conversion or tower base/top. It only has color representation, not animal identity, but looks like some structure anyway, [≠that the animal≠] fitting with others in the case of grey grouping.. Maybe there's two ways to win. Have two cities and [≠defeat≠] encounter the lava monster with a standard dice roll stand-off, or pass a group or 3 of-a-kind through [≠the opp a≠] some choice of port, which port? 2 player: the two either side of the opponent. 3 player: the opposite. 4 player: the one not adjacent to starting port.  $[\neq]$  6 player: The opposite port, even though it's occupied as starter, so maybe less have to pass and only one city above 3 players. (4,5, or 6). / GAME DESIGN PROJECT 'swarm of bees' and 'Lava Monster' (once awakened) move on the same dice roll each player turn. The bees go on a kind of random walk with directions mapped from the six numbers of the dice, clockwise from north, say, with north being '1', and south being '4'. The L.M. goes clockwise a number of  $[\neq pac \neq]$  steps equal to the dice roll, but the step length being the total number of pieces free in the ring, minus the number in cities, with minimum zero. L.M. is released when a city is completed. [≠Don't even have to≠] When two cities are completed, for 2 or 3 player games, (if you have added pieces to what becomes a completed city, that'll do), you can fight the lava monster to win, but the lava monster doesn't fight cities, and we could have if the lava monster stops next to anything with lower defense, it's just removed. But if anything with higher attack moves next to it, [≠you win! Game over!≠] it's back to the middle. (Maybe get points) / Looks like it's just a big race though. 5 reaching port seems like it could be too easy. What happens when all the pieces are in the middle being moved by ANYONE for the port race finale? I guess you've to sort of go AROUND THE RING IN THAT CASE. Let's say if it moves from the inner ring to an outer space on the piece moving player's side of the board, it can race to the port, but it HAS TO BE ON THE STARTING HALF. That's GOOD: City building together in the middle against the L.M., but racing around the edge. That's general.. But what do the bees do? [≠They start on the opposite middle grey opposite a comp≠] They cause any adjacent pieces to move away  $[\neq inth \neq]$  in the opposite direction automatically, without effects, when they move next to them, and you can't get rid of them. Simple.. TO DO: Arrange the glowing stars around bedroom ceiling light in hey to resemble the game board, using the blue ones for the lava ring and grey groups.. The pieces should be directionally aligned to indicate the player that started them, facing from their beginning port forward, away from their player, but of course, they're free to move in any direction, in the middle. Also, to speed things, what if you get to move (or try to move) each color you might have a piece belonging to, per turn? Max of 5 pieces per turn.. / The backs should really be identical and could be random to start, or chosen by players.. Should be 3x5 each: 30: 6 of each color, or some multiple. But to organise the distribution of ADs, analyse tower and [≠start≠] halt relationships. / 1:36pm 29/04/24 Plotted vertices and normals to a hex slab angled so that looking at it face on produces the same outline as the cube. Do I want 7 colors for this? {red, grey, green, brown,

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blue, yellow, black}. Yeah. 3:03pm Obj done. Minor re-interpretation of coords.
Notes have :v 0.5000 0.5000 -0.5000v -0.1666 0.8333 -0.1666v -0.5000 0.5000
0.5000v -0.1666 -0.1666 0.8333v 0.5000 -0.5000 0.5000v 0.8333 -0.1666 -0.1666v
0.1666 0.1666 -0.8333V -0.5000 0.5000 -0.5000V -0.8333 0.1666 0.1666V -0.5000 -
0.5000 \ 0.5000v \ 0.1666 \ -0.8333 \ 0.1666v \ 0.5000 \ -0.5000v \ -0.5000xyz \ -> \ -yzx, in obj.
3:13pm one side concave, width texture should take 3 or 4 times sample. Color
fine though. Trying a 64 texture. 3:31pm Looks right now. On to selection and
collision boxes. It's been given .75 the double texture sample for the 6 prism
widths. How did it end up facing -x,-z? 4:22pm Added 7 sel/col boxes. 6 more
with two edges outlain each through the surface should do, next. Starting rough.
4:58pm found nice vertex hugger. Thinking of another two fore and aft. 5:05pm
all the copies extend more than hoped. Actuall just the three odd ones. Gotta
move the x and z values in. Of course, there's a parity error. Fixed. 5:09...
5:22 Really cool. Seeing as the next levels though fitting onto the
tesselation's surface, map off centre in the way that planes of spheres would
when packed, thinking of what it might be like to have the board segments
textured with three colors each, and placed so that they together make hexagons
in the pattern of the lava monster game but shifted over slightly, so that the
next layer of moveable pieces can be set on them during proto-play. But because
they are stackeable to make a two-high-tower, the additional top layer in such a
stack will still be out of alignment. The pieces aught then to be perhaps
thicker. If the hexagons were set to be expanded by a scale of 3, and brought
way thick, two R3 thick pieces could easily be placed normal to it, thought
there would be offset making placement slightly tedious, 2 or three actions to
place something normal. Colored pieces are now going to be added to Tinny
Jangle. 5:33pm. For the board, though, which to be honest is more than I could
have expected given I haven't played Minetest in months. 5:57pm cuppa. 7:50pm
placed a full color board in TJ.One way around ambiguity over who commands what
piece in L.M. game, to have one player be flying type, one be underground type,
but those colors are the furthest placed from each player's (if only two
players) home ports, so you can see at a glance who owns what, but... How can it
be like chess, the way that game is sometimes long, sometimes short, but always
reasonably challenging, without obvious tricks or overly-deterministic paths?
Checking the king is wholesomely confrontational, but lacking here. There are
flaws: something is of course missing. Shall I have a real think? Or continue
playing at the existential joy of its being SOMETHING.. It feels somewhat empty,
slow, confusing. What if you pick one animal each and the rest are set on the
board, and you've got some progression whereby the piece you use is upgraded one
point TOTAL AD each phase. Then you could let the die roll move EVERY other
piece, creating a sort of a realistic chaos effect, an attractive simulation,
eventful interplay of paths... Or even could have ALL spaces walkable by all
pieces, but I'd better make up my mind because I'll be getting ignorant losing myself in the 'creator's couch sitting state'. If there was a sense of gradient,
up the mountain perhaps, so that closeness to the centre is the heirarchy, the
decider of greatness of stature, or maybe upturning the pieces represents
'building', it happens anywhere, (except lava) and the buildings have effects
that stack with overlapping range. Isn't that easy to calculate at a glance?
Only it's still too ambiguous WHO owns or commands or summons WHICH animal. You
could let any piece be captured and placed in the lava ring to represent a
bridge over the abyss for the others. But it seems the moves will for a long
time during play initially have little tension marking their movements. You'll
be impatient, choosing either to rush a few forward or hoard loads together,
which is more fun? It's too flexible too buildy-uppy. Maybe they start in the
middle region, having to pass each other's cities, and thereby making more
reasonable the notion of halting effects. They all know each other, the animals,
they COME from the city, AND there's still a notion of directionality, simply
marking the pieces would give them direction, orientation.. Or what about having
a bunch of cards of each color? Or new pieces, and an interaction with animals
which appear depending which space is landed upon in a path chosen freely but
limited in length each die roll by the die. So you sort of choose the color a
lot more freely. Hey, you could just hold your animal pieces off the board, have
a single piece that represents you, and be free to place them
 around your piece on relevant hexagonal spaces to create some kind of effect
conditional upon the arrangement of pieces. If the've to be connected, there's a
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clear sense of rivalling. Step size could be such that rolls create risk of losing pieces through disconnectedness, the lost groups being possibly reclaimed or taken by the opponents. I suppose, quite simply, there could be a gradient of greater to lesser TOTAL A/D moving out from the pieces (and connected to it) that are representing the players and effected by the rolls of the dice. You might have to keep certain pieces fixed and re-arrange the group around them. This is benefitting the players by creating a challenge that is independent of their interactions and specific to the board, the ADs, and the dice rolls.. On contact of these groups, key pieces could polarise, and the chain could somehow burn from the middle, in special calculation of scores, so that something like 'whoever is reached first by the chain of piece removal (or action of effect) lets the other player keep the unaffected or remaining pieces, like unicels scrapping over an amino or something. Try to figure good rules for this.----9:42am 30/apr/24 3 textures of pock blanked out. Should update stones but can't find folder. 10:05am sorted. 10:13am got a recipe together for billboards. It's 6 white wool below, and a WW, grey brush, and empty book in any of 6 combos for the top row of the craft. 11:32am 1/5/24 added hexp, took longer than should have. Had to rush the sel/col boxes too.5:20pm Might look at corner joinder. 7:03pm finishing sel/cols and rather than form another triangle, since it's getting hard to breath, I'm just using the sel/cols for aset, which is luckily oriented the same. 7:10pm Yeah tht'll do. hexar added.10:56am 2/5/24 Looking at gytul. If sel/col boxes expanded a bit, it'd be easier to manipulate. Gytul and gytur are composed of two triangle surfaces, which have well defined functions associated when rendered. The  $\Delta s$  are defined in standard xyz coordinates (that's where the coordinate marker diagram might display x, y, and z axes in an anticlockwise direction) as sets of three points where they intersect the boundaries of the nodespace unit in which they are positioned with param2 of 0.  $\{(0.5, -0.5, -0.5), (0.5, 0, 0.5), (-0.5, -0.5, 0)\}, \text{ and } \{(-0.5, -0.5, 0), (0.5, 0, 0.5), (-0.5, -0.5, 0)\}$ 0.5,0.5,0.5)}. I'm concerned about the trade-off between ease of manipulation initially, and traversability, because when combined to form the basic structure for which it was designed, the gyroid, it may only come up just about to head height, and bigger sel/col boxes means less space to maneuver on the object. I'll save a copy of the sel/cols for it here in case it wants changing back. {-0.5, -0.5, 0, -0.44, -0.44, 0.06,  $\{-0.227, -0.5, -0.227, -0.107, -0.44, -0.107\}$ ,  $\{0.107, -0.44, -0.107\}$ ,  $\{0.107, -0.44, -0.107\}$ ,  $\{0.107, -0.107\}$ 0.5, -0.393, 0.227, -0.44, -0.273}, {0.44, -0.5, -0.5, 0.5, -0.44, -0.44}, {-0.5, -0.5, -0.5, -0.5, -0.44, -0.44},  $0.227, 0.107, -0.44, -0.107, 0.227\}, \{-0.227, -0.393, 0.107, -0.107, -0.273, 0.227\},$ {0.107,-0.393,-0.06, 0.227,-0.273,0.06}, {0.44,-0.393,-0.227, 0.5,-0.273,-0.107}, {-0.5,0.107,0.273,-0.44,0.227,0.393},{-0.227,-0.06,0.273, -0.107,0.06,0.393}, {0.107,-0.227,0.273, 0.227,-0.107,0.393},{0.44,-0.227,0.107, 0.5,-0.107,0.227}, {-0.5,0.44,0.44, -0.44,0.5,0.5},{-0.227,0.273,0.44, -0.107,0.393,0.5}, {0.107,0.107,0.44, 0.227,0.227,0.5},{0.44,-0.06,0.44, 0.5,0.06,0.5}Now for simplicity, I'm going to double the x and z widths of the sel/cols exclusively on the lower, flatter triangle, bringing those on the boundary inward, and see if it increases the density of sel/cols enough that it works for building. NO. Ideally, there should simply be more boxes added in the interstices between the bowling pin pattern already there. How many goes around ten with a shared border of 4? I can see where to put them. A reasonable way would be to identify two boxes in the line to be supplemented, and the calculations will be easier. I'll draw a picture, and simply label the vertices and correlete them with an index of the copied sel.cols I saved.6/5/24 10:26am Added s\_52hul/r. Changed brushrock\_8 to brushrock\_c because it's curved, and making the corner brushrock the new brushrock\_8 because the rock takes up 1/8 of the upper surface. 10:59am Brushrock\_8 added. 11:45am What if the tiles correspond exactly with the fs in .obj? Worked for s\_22. I could remove the 'g top... etc' lines from s\_22. 11:53am Saved as (what it was) on desktop, removed them lines, put 'O cube' at top, cos it's on all of em. I suppose each category is ordered within its own group but they can mix and don't have to use a unique global ordering. 11:55am Checked and looks the same. Now I'll remove the 's off's. So I don't know what that does, but don't think I need it either. 11:57 Looks fine. But the s\_21 is using the same texture on all sides. 12:03pm Perhaps I should split then the 2\_21 into 7 sections like the s\_22. But first, since it's far easier, I'll reduce s\_22 the way s\_21 was done, with the encoding running through vs, vts, vns, and fs for each face individually. I just bunched them together and can see the redundancy. 12:09 still works. What if I removed a 6th tile element

from the regnode of something... say, brushrock\_52ul? Took rock out. The front replicates the bottom. What is it? Top, bottom, right, left, back, front? Should do experiment to see what happens to, say, dice spots on a cube with variable texture set size. Doesn't nccessarily solve this one though. Taking out : "brushrock\_9.png^[transformR90", "rushrock\_9.png^[transformR270", "dirt.png^grass\_side.png", "rock.png",
"rock.png","dirt.png^grass\_side.png","rock.png","rock.png"and putting in just "rock.png" see does it recognise, then taking a break. Yes it does. Adding a texture to the tiles list: grass. No effect. Looks like it's just the first listed element gets duplicated. Doesn't happen to another one: s\_22r, when "grass.png" added 5 times.minetest.register\_node("stones:brushrock\_21", { description = "4Brush 3Rock /8", paramtype = "light", paramtype2 = "facedir", tiles = {"rock.png", "grass.png"}, groups = {cracky=3, s light\_source = 0, drop = "stones:brushrock\_21", collision\_box = groups = {cracky=3, soil=1},  ${type="fixed",fixed={{-0.5, -0.5, 0.5, 0.5, 0.5}}}, selection\_box = {type="fixed",fixed={{-0.5, -0.5, 0.5, 0.5, 0.5, 0.5}}}, selection\_box = {type="fixed",fixed={{-0.5, -0.5, 0.5, 0.5, 0.5, 0.5}}}, selection\_box = {type="fixed",fixed={{-0.5, 0.5, 0.5, 0.5, 0.5}}}}, selection\_box = {type="fixed",fixed={{-0.5, 0.5, 0.5, 0.5, 0.5}}}}, selection\_box = {type={-0.5, 0.5, 0.5, 0.5, 0.5}}}$  $\{type="fixed", fixed=\{\{-0.5, -0.5,$ -0.5, 0.5, 0.5, 0.5}}},drawtype = "mesh", mesh = "s\_21.obj"})Not added. 12:23pm1:25pm Easiest way around this conundrum could be to use a conbined texture of double the resolution to map the vts to. ETA: 10 mins. 1:31pm made the double texture.So replacing out this:vt 0 0vt 1 0vt 1 1vt 0.5 1vt 0 0.5vt 0.5 0vt 0 1...f 1/1/1 5/2/1 4/3/1 3/4/1 2/5/1f 1/1/2 2/6/2 7/4/2 6/7/2f 2/6/3 3/2/3 8/3/3 7/4/3f 3/1/4 4/6/4 9/4/4 8/7/4f 4/1/5 5/2/5 10/3/5 9/7/5f 5/1/6 1/2/6 6/3/6 10/7/6f 8/6/7 9/2/7 10/3/7 6/7/7 7/5/7... done.1:46pm brushrock\_21 added. 2:00pm Going to add the regular version of s\_21. Done. Going to balance the r5/2 slope Lowhalf pyramid which is right with a left. 2:20pm Made png for s\_52pl. 2:35pm rendered with a vertex a tad too high. Fixed and have 3 sel/col boxes to do. 2:53pm some redundancy noticed in the pyramid pair: got boxes could be made columns. 3:21pm s\_52pl done. 3:41pm te last two, s\_21 and brushrock\_21 were the same obj. 3:49pm Touched up, and two blackpools down.7:51am Adding s\_527l and r. Looks like it's another double sized texture. 8:09am Firefox won't open a png. Redoing vts and fs. 8:32 reverse orientation vt. 8:37am Done but no texture load because probable the reversed orientation segment. Shall have to reorient the parts of the texture quilt. 8:44am redoing vts. 8:54 done, but unknown node texture (moss). Looks like the convace face glitched out too. 9:06am updated to no avague. Maybe tiles has to be in a bracket. Slight chage in the remaining skew on the two-part face of the error texture render. 9:09am yes, the green moss is gridded right, now to find out if I can get it to show properly as dual brushrock for the step into what was black pool but now is different because of the overlap which I don't like nd sort of want to quickly avoid seeing as Iruck out of the garden lickety-split on 3 roads... maybe today, maybe tomorrey, maybe next week... 'I got some' 'Sure was nice' 'I came up on the mountain, saw the rising sun, and I got some.... wow... satisfaction.. yes I did...' It's working now. 9:17am it's the other one gonna be used as a step.9:26 organized. 9:52am both brushrock r52 steps done. 10am gonna make diagsteps and it's right and left wallish banisters brushrock, and do a r5/2 lower part for normal step... 3:35pm Back from refreshing hike and redoing diagsteps to look similar to R2 Slope in menu. Ooops, before I input regular texture maps I gotta remember I've to use a double sized canvas with more types.4:27pm Some of the cycles defining the triangles of the double texture for s\_2u, and the order of faces were irregular. Fixed both, but the slopey bit of the steps is invisible. 4:51 done. Doing L/R to Vert and Horz @5:15pm... 6:08pm four objs done. 6:12pm regnodes updated. Looks good but for missing Left to Vert. Just accidental renaming to 53lv. Fixed. 7:14pm s\_21u badly glitched. 7:37 s\_21u done for stone. Conbining s\_2 and s\_22. 8:28pm looks good and doing 3 basic rubble alterations. Well, was thinking of the R2 Slope, and the R5/2 Highhalf and Lowhalf, but now I'm thinking of rubble being like rubble and bumpy. Later. 8:35pm Combining s\_2 and s\_52, and rotating sel/col for that new Right to Vert but not now. 8:41pm8:07am 8/May/2024 Watched Fuller's Folly. 9:40am better do it. 9:44 Regnoded s\_252. 10:23 r and l and despite flash restart made right obj not too tough. 10:39 both added. 52rv and 52rh diagsteps to be rotated in sel/col 90 degrees. 10:54am selcols for 52rv reverted back out on the lower slope, that means I accidentally went back in the neg x direction

the slope line on coordinates, an easy error and easy to fix. 11:18am doing a half rubble (R2) would tidy up the pools, but should I make a way to tube-

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connect them away. On 166 for the menu too. So rubble has rock sides. Eh, maybe
not. 11:33am. Crazy, but, let the rubble glow red. It's cracked the way the
regular crack cracks green to bust a block, but this red'll be like coming in
from the edges, and we can let the rest sit on it. Well, mde the animation
still, 16, but maybe it should be blue rather than red. 12:24 kill two birds
with the one stone: use pock under the dirt on all the grass? Bit confusing for
newcomers. But it's a good one, what's the harm? Who needs to see the dirt at
the bottom? Just have to change a few textures: ETA:3 hours. Another time,
maybe. So I'll just leave the dirt visible underneath. Or have the rubble there.
Hmm. Last node to add has to be rush. 12:35pm3:06pm Removed safety net, octas,
took snapshot of full 7 pages of menu, copied out uploadables.12:35pm 9th May
Must see if animated double sized texture may be used for an hourglass, and if
the animation can be made to run on 'place'ing it. But which to try first? The
texture check, the object model, or the logical test for placement? Another
rather basic question for me is 'What's the maximum number of frames? (Oh, and
to get the animation to run only once, of course.)Answers:[()a,()b,()c],[()=n],
 [()y,()n]1) Use blank faces intermittently if animated texture to animate
appearance of rotations (eg a flag) while drawing from an obj.2)First try a
basic animation on some obj, with a spool texture.10am 10/May/2024 made 100
numeral spool, but not added. To update this gytur and gyrul, the gyroid
translational elements, takes a total of 60 sel/col boxes, all same size except
for at the boundaries where there's only a half box but it connects with another
half box when part of the overall gyroidal construction. 10:-5 so, just find the
centres of each box, and the difference each is to be moved along their rows,
there's two for each box.vertices that are already there so far, for
creative:gytur:0.5,0.5,0.5-0.167,0.333,0.5 and 0.5,0.167,0.333 are on the same
row, separated by three more cubes of diameter 0.120 each. The separation is
 (0.5 - (-0.167))[ \pm / 3 = 0.222 \pm ] / 4 = 0.1666 for x, [ \pm (0.167 - 0.333) / 3 = -0.055 for y \pm ]
0 for y, and (0.333-0.5)[\neq/3 = -0.055\neq]/4 = -0.0414 for z. For the lower rows:I
look for the third lowest z coordinate, where two sel/col boxes are on the same
row, again seperated by three to add.0.167,-0.5,-0.167 and -0.5,-0.333,-0.167
have seperation:(0.167-(-0.5))[\neq/3 = 0.222\neq]/4 = 0.1667, (-0.5-(-0.333))[\neq/3 = -0.1667]
0.055 \neq ]/4 = -0.0414, 0, for x,y,and z, but hold on, shouldn'T the y-separation
be zero above? Correcting...(10:36am)-0.167,0.167,0.5 and 0.5,0.167,0.333 yeah.
seperations: (0.222,0,-0.0555) for upper triangle, and ((-0.222,-0.0555,0) for
lower triangle, starting at opposite boundaries for each, 15 above and 15 below.
The starting vertices are: (-0.167, 0.333, 0.5), (-0.167, 0.167, 0.5), (-0.5, 0, 0.5)
for upper, Shared are (-0.167, -0.167, 0.333), huh never noticed before an extra
sel/col that shouldn't be there, deleting it, there'll be an extra sel/col to add now,... so the other shared is just north of 0 but with lower y, (0.167,-
0.333,0.167) for shared, and(0.5,-0.5,0), (0.167,-0.5,-0.167), (-0.167,-0.5,-
0.333) for lower boundary accumulators. So the new vertices are:(-
0.167 + 0.222k, 0.333, 0.5 - 0.0555k) -> \{(0., \ne] \text{but actually there are four } -> \{(0., \ne] \text{but actually there are four } -> \{(0., \ne] \text{but actually there are four } -> \{(0., \ne] \text{but actually there are four } -> \{(0., \ne] \text{but actually there are } -> \{(0., \ne] \text{but actually there } -> \{(0., \ne] \text{but actually } -> \{(0., \ne] \text{bu
incrementations counting the final vertex, so they've got to be divided by 4,
not 3. 11:06am corrected. so(-0.167+0.1667k,0.167,0.5-0.0414k) ->
\{(0,0.167,0.459),\ (0.167,0.167,0.417),\ (0.333,0.167,0.375)\}(-0.167+0.1667k,0.167,0.5-0.0414k)\ ->\ \{(\ but\ I\ nissed\ that\ other\ one,\ turns\ out\ it\ nissed\ other\ one,\ other\ other\ one,\ other\ other\ other\ other\ one,\ other\ othe
was actually right, just there's only two to add and because there's no final
vertex already there at the boundary I thought I'd start at the next one. That's
why I was confused, it's fixed now. Here it is though: (0.167,0.333,0.5)
+(0.1667,0,-0.0414)k \rightarrow \{(0.333,0.333,0.459), (0.5,0.333,0.417)\} and what I was
doing: (-0.5+0.1667k, 0, 0.5-0.0414k) -> This one has 5 added \{(-0.333, 0, -0.459),
 (-0.167, 0, -0.417), (0, 0, -0.375), (0.167, 0, -0.333), (0.333, 0, -0.292), (0.5, 0, -0.417), (0, 0, -0.375), (0.167, 0, -0.333), (0.333, 0, -0.292), (0.5, 0, -0.417), (0, 0, -0.375), (0.167, 0, -0.333), (0.333, 0, -0.292), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (0.5, 0, -0.417), (
0.25)} There's one extra because of that one that was hovering above the surf.
Then for the shared ones they go one way with one type of increment and the
other way with the other corresponding type: 1x(-0.1667, 0.0416, 0) (+) (-0.167,-
0.167, 0.333) (+) 3x(0.1667, 0, -0.0416) -> \{(-0.333, -0.125, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), [], (0, -0.167, 0.333), []
0.167, 0.292), (0.167, -0.167, 0.25), (0.333, -0.167, 0.208)} The next ones have the
same sel/cols to meet at the boundaries, but the increments are switched with
3x(-0.1667, 0.0416, 0) and 1x(0.1667, 0, -0.0416) added to (0.167, -0.333, 0.167) to
make (the order doesn't matter so I'm writing them right to left) {(0.333,-
\{0.333, 0.125\}, [], \{0, -0.292, 0.167\}, \{-0.167, -0.25, 0.167\}, \{-0.333, -0.208, 0.167\}\}
The lower ones: (0.5, -0.5, 0) + (-0.1667, 0.04167, 0)k -> \{(0.333, -0.458, 0),
 (0.167, -0.416, 0), (0, -0.375, 0), (-0.333, -0.208, 0), (-0.5, -0.167, 0)\}(0.167, -0.5, -0.167, 0)
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0.167) + (-0.1667, 0.0416, 0)k \rightarrow \{(0, -0.458, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.167), (-0.167, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417, -0.417
0.333, -0.375, -0.167) \{(-0.167, -0.5, -0.333) + (-0.1667, 0.04166, 0)k \rightarrow \{(-0.333, -0.333, -0.375, -0.167)\}
0.458,-0.333), (-0.5,-0.417,-0.333)}So the sel/cols go around these points with
diameters of 0.12 each, to fit. For clarity, the points: \{(0.333, 0.333, 0.459),
  (0.5, 0.333, 0.417), \{(0, 0.167, 0.459), (0.167, 0.167, 0.417), (0.333, 0.167, 0.375),
  {(-0.333,0,-0.459), (-0.167,0,-0.417), (0,0,-0.375), (0.167,0,-0.333),
  (0.333, 0, -0.292), (0.5, 0, -0.25), \{(-0.5, -0.083, -0.333), (-0.333, -0.125, 0.333),
[], (0, -0.167, 0.292), (0.167, -0.167, 0.25), (0.333, -0.167, 0.208)}, \{(0.5, -0.167, 0.292)\}
0.333, 0.083), (0.333, -0.333, 0.125), [], (0, -0.292, 0.167), (-0.167, -0.25, 0.167),
 (-0.333, -0.208, 0.167), \{(0.333, -0.458, 0), (0.167, -0.416, 0), (0, -0.375, 0), (-0.375, 0), (-0.333, -0.208, 0.167)
0.333,-0.208,0), (-0.5,-0.167,0)},{(0,-0.458,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.167), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.167,-0.417), (-0.16
0.333,-0.375,-0.167)},{(-0.333,-0.458,-0.333), (-0.5,-0.417,-0.333)}Different
approach to gytul, for sense of freedom. I'm just copying the sel/cols directly.
\label{logistics} \mbox{Upper:} \{-0.227, 0.273, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.393, 0.5\}, \ \{0.107, 0.107, 0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, 0.44, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.
0.227, 0.227, 0.5}, {0.44, -0.06, 0.44, 0.5, 0.06, 0.5}, Shared: {0.107, -0.227, 0.273,
0.227, -0.107, 0.393},
                                                                                                                                          {-0.227,-0.393,0.107, -0.107,-0.273,0.227},Lower:{-0.5,-
0.5,0, -0.44, -0.44, 0.06, \{-0.227, -0.5, -0.227, -0.107, -0.44, -0.107\}, \{0.107, -0.44, -0.107\}
0.5, -0.393, 0.227, -0.44, -0.273 The seperations: Well I know for upper it's neg x
a lot, same y and back -z a bit, so its gotta be (-0.1667,0,-0.0417) Then for
 lower it's positive x a lot, up a bit, and same z, so (0.1667,0.0417,0) Then the
 sel/cols are:[{-0.393, 0.273,0.393, -0.273,0.393,0.458}, {-0.5,0.273,0.352, -
0.44,0.393,0.417}, Just for clarity's sake: GO -1/6, ZERO, -1/24!!!You know, you
could just, lol, do fractions instead of these decimals. Hmmm. ok. Nah, I'm fine
with this. {-0.06, 0.107, 0.393, 0.06, 0.227, 0.5}, {-0.227, 0.107, 0.352, -
0.107,0.227,0.472}, here because the z increment is less than the sel/col
diameter you expect the two closest to the boundary with lowest gradient to both
 reach it. {-0.393,0.107,0.32, -0.273,0.227,0.44}{0.273,-0.06,0.393,
0.393, 0.06, 0.5 \{0.107, -0.06, 0.352, 0.227, 0.06, 0.472\} \{-0.06, -0.06, 0.32, 0.227, 0.06, 0.472\}
0.06, 0.06, 0.44 \\ \{-0.227, -0.06, 0.273, -0.107, 0.06, 0.393\} \\ \{-0.393, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, 0.232, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.
0.273, 0.06, 0.352{-0.5, -0.06, 0.189, -0.44, 0.06, 0.309}Shared uppers: 3 then just
1:{-0.06,-0.227,0.232, 0.06-0.107,0.352} added{-0.227,-0.227,0.19, -0.107,-
0.107,0.31} added{-0.393,-0.227,0.148, -0.273,-0.107,0.268} addedso final
already there at {-0.5,-0.227,0.107, -0.44,-0.107,0.227}The 1:{-0.393,-
0.393, 0.06, -0.273, -0.273, 0.18, and \{-0.5, -0.393, 0.017, -0.44, -0.273, 0.137\}
addedAnd 1 and 3 for lowers: (actually 2 and 3){0.273,-0.18,0.273, 0.393,-
0.06,0.393}, {0.44,-0.137,0.273, 0.5,-0.017,0.393} added{-0.06,-0.352,0.107,
0.06, -0.232, 0.227\}, \{0.107, -0.31, 0.107, 0.227, -0.19, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.107, 0.227\}, \{0.273, -0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268, 0.268
0.393, -0.148, 0.227 \} \ \ with final \ \ at \ \{0.44, -0.227, 0.107, \ 0.5, -0.107, 0.227 \} Lowers: \{-0.393, -0.148, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.227, 0.107, 0.107, 0.227, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.107, 0.
 \{0.227, -0.346, -0.06, \ 0.393, -0.226, 0.06\}, \ \{0.44, -0.304, -0.06, \ 0.5, -0.184, 0.06\} \\ \text{added and amended in regnode5, 3, and 2} \{-0.107, -0.352, 0.107, \ 0.06, -0.06\} \\ \} 
0.232, 0.227\} \neq \neq \neq \neq, \{0.06, -0.31, 0.107, 0.18, -0.19, 0.227\}, \{0.227, -0.268, 0.107, 0.18, -0.19, 0.227\}
0.347, -0.148, 0.227\}, \{-0.06, -0.5, -0.107, \ 0.06, -0.393, -0.227\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.27\}, \ \{0.107, -0.472, -0.272, -0.272\}, \ \{0.107, -0.472, -0.272, -0.272\}, \ \{0.107, -0.472, -0.272, -0.272\}, \ \{0.107, -0.272, -0.272, -0.272\}, \ \{0.107, -0.272, -0.272, -0.272, -0.272\}, \ \{0.107, -0.272, -0.272, -0.272, -0.272, -0.272\}, \ \{0.107, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272\}, \ \{0.107, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.272, -0.
0.107,\ 0.227, -0.352, -0.107\},\ \{0.273, -0.43, -0.107,\ 0.393, -0.31, -0.227\}\{0.273, -0.107,\ 0.393, -0.31, -0.227\}\}
that's gytul, now I'll copy it in, and when I do gytur, it's a kind of boxening
of centres job.I suppose I'd better put them in order here first.{-0.5,-0.5,0,
0.44, -0.44, 0.06, \{-0.227, -0.5, -0.227, -0.107, -0.44, -0.107\}, \{0.107, -0.5, -0.393, -0.44, -0.44, -0.107\}
0.227, -0.44, -0.273, \{0.44, -0.5, -0.5, 0.5, -0.44, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.44\}, \{-0.5, -0.227, 0.107, -0.227, 0.107, -0.227, 0.107, -0.227, 0.107, -0.227, 0.107, -0.227, 0.107, -0.227, 0.107, -0.227, 0.107, -0.227, 0.107, -0.227, -0.227, 0.107, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0.227, -0
0.44, -0.107, 0.227\}, \{-0.227, -0.393, 0.107, -0.107, -0.273, 0.227\}, \{0.107, -0.393, -0.44, -0.107, 0.227\}, \{0.107, -0.393, -0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.107, -0.273, 0.227\}, \{0.107, -0.393, 0.227\}, \{0.107, -0.393, 0.227\}, \{0.107, -0.393, 0.227\}, \{0.107, -0.393, 0.227\}, \{0.107, -0.393, 0.227\}, \{0.107, -0.393, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.273, 0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, -0.227\}, \{0.107, 
0.06, 0.227, -0.273, 0.06, \{0.44, -0.393, -0.227, 0.5, -0.273, -0.107\}, \{-0.44, -0.393, -0.227, 0.5, -0.273, -0.273, -0.107\}
0.5, 0.107, 0.273, -0.44, 0.227, 0.393, \{-0.227, -0.06, 0.273, -0.107, 0.06, 0.393\},
 \{0.107, -0.227, 0.273, 0.227, -0.107, 0.393\}, \{0.44, -0.227, 0.107, 0.5, -0.107, 0.227\},
  {-0.5,0.44,0.44, -0.44,0.5,0.5},{-0.227,0.273,0.44, -0.107,0.393,0.5},
 0.472,-0.393, 0.5,-0.352,-0.273}...But I don't need to. But it's clearer...?No,
add them in first and just leave it!{0.44,-0.472,-0.393, 0.5,-0.352,-0.273},
  {0.273,-0.5,-0.393, 0.393,-0.393,-0.273},{-0.107,-0.352,0.107, 0.06,-
0.232, 0.227 \}, \quad \{0.06, -0.31, 0.107, \quad 0.18, -0.19, 0.227 \}, \quad \{0.227, -0.268, 0.107, \quad 0.347, -0.268, 0.107, \quad 0.347, -0.268, \quad 0.347, \quad 0.347
0.148, 0.227\}, \{-0.393, -0.5, 0, -0.272, -0.393, 0.06\}, \{-0.227, -0.472, 0, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, -0.107, 
0.352, 0.06, \{-0.107, -0.43, 0, 0.06, -0.31, 0.06\},
        \{0.06, -0.388, 0, 0.18, -0.268, 0.06\}, \{0.227, -0.346, 0, 0.393, -0.226, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.06\}, \{0.273, -0.268, 0.068, 0.06\}, \{0.273, -0.268, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.068, 0.0
0.18, 0.273, 0.393, -0.06, 0.393, \{-0.06, -0.352, 0.107, 0.06, -0.232, 0.227\}, \{0.107, -0.06, -0.232, 0.227\}
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0.31, 0.107, 0.227, -0.19, 0.227\}, \{0.273, -0.268, 0.107, 0.393, -0.148, 0.227\}, \{0.44, -0.268, 0.107, 0.393, -0.148, 0.227\}, \{0.44, -0.268, 0.107, 0.393, -0.148, 0.227\}
0.304, 0, \ 0.5, -0.184, 0.06\}, \{-0.393, -0.393, 0.06, \ -0.273, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -0.273, 0.18\}, \{-0.06, -
0.227, 0.232, \ 0.107, -0.107, 0.352\}, \{-0.227, -0.227, 0.19, \ -0.107, -0.107, 0.31\}, \{-0.227, 0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.107, 0.107, 0.31\}, \{-0.227, 0.19, \ -0.227, 0.19, \ -0.227, 0.19, \ -0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0.227, 0
0.227, 0.06, 0.472\}, \{-0.06, -0.06, 0.32, \ 0.06, 0.06, 0.44\}, \{-0.227, -0.06, 0.273, \ -0.06, 0.472\}, \{-0.06, -0.06, 0.32, \ 0.06, 0.06, 0.44\}, \{-0.06, -0.06, 0.273, \ -0.06, 0.472\}, \{-0.06, -0.06, 0.32, \ 0.06, 0.06, 0.44\}, \{-0.020, -0.06, 0.273, \ -0.06, 0.472\}, \{-0.06, -0.06, 0.32, \ 0.06, 0.06, 0.44\}, \{-0.020, -0.06, 0.273, \ -0.06, 0.472\}, \{-0.06, 0.06, 0.472\}, \{-0.06, 0.06, 0.32, \ 0.06, 0.06, 0.44\}, \{-0.006, 0.273, \ -0.06, 0.472\}, \{-0.006, 0.06, 0.44\}, \{-0.006, 0.273, \ -0.06, 0.472\}, \{-0.006, 0.06, 0.472\}, \{-0.006, 0.06, 0.472\}, \{-0.006, 0.06, 0.472\}, \{-0.006, 0.06, 0.472\}, \{-0.006, 0.06, 0.472\}, \{-0.006, 0.06, 0.472\}, \{-0.006, 0.06, 0.472\}, \{-0.006, 0.273, \ -0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.273, \ -0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.273, \ -0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006, 0.472\}, \{-0.006
0.107, 0.06, 0.393\}, \{-0.393, -0.06, 0.232, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.06, 0.189, -0.273, 0.06, 0.352\}, \{-0.5, -0.273, 0.06, 0.189, -0.273, 0.06, 0.352\}
0.44, 0.06, 0.309, \{-0.06, 0.107, 0.393, 0.06, 0.227, 0.5\}, \{-0.227, 0.107, 0.352, -0.44, 0.06, 0.309\}
0.107, 0.227, 0.472\}, \{-0.393, 0.273, 0.393, -0.273, 0.393, 0.5\}, \{-0.5, 0.273, 0.352, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.393, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.273, 0.27
0.44,0.393,0.417}] addedI'll go up and make sure I add the amended version of
each as lain out segmented the first time, marking them as added when added. Cos
they won't be in the right order on the doc but I'll be seeing them being added.
1:46pm Uppers done. The z values should be way further back. Roger that's a
negative! 2:07pm Two more.2:10pm Yeah man, nailed it. Now those centres again:
 {(0.333,0.333,0.459), (0.5,0.333,0.417)},{(0,0.167,0.459), (0.167,0.167,0.417),
  (0.333, 0.167, 0.375), \{(-0.333, 0, -0.459), (-0.167, 0, -0.417), (0, 0, -0.375),
 (0.167, 0, -0.333), (0.333, 0, -0.292), (0.5, 0, -0.25), \{(-0.5, -0.083, -0.333), (-0.167, 0, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.183, -0.1
0.333, -0.125, 0.333), [], (0, -0.167, 0.292), (0.167, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.25), (0.333, -0.167, 0.2
\{0.167, 0.208\}, \{(0.5, -0.333, 0.083), (0.333, -0.333, 0.125), [], (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167), (0, -0.292, 0.167
  (-0.167, -0.25, 0.167), (-0.333, -0.208, 0.167), \{(0.333, -0.458, 0), (0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.167, -0.1
0.416,0), (0,-0.375,0), (-0.333,-0.208,0), (-0.5,-0.167,0)\}, \{(0,-0.458,-0.167),
 (-0.167, -0.417, -0.167), (-0.333, -0.375, -0.167), \{(-0.333, -0.458, -0.333), (-0.5, -0.167)\}
0.417, -0.333)}z is 0 for y= \{-0.458, -0.416, -0.0.375, -0.208, -0.167\}\{0.273, -0.416, -0.0.375, -0.208, -0.167\}
2:32pm ok added them let's see. Lotta floaters. They're pos y, but neg z.
 \{0.273, 0.273, 0.393, 0.393, 0.393, 0.5\}, \{0.44, 0.273, 0.357, 0.5, 0.393, 0.477\}, \{-1, 0.273, 0.273, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.393, 0.3
0.06, 0.107, 0.393, 0.06, 0.227, 0.5, \{0.107, 0.107, 0.357, 0.227, 0.227, 0.477\},
                                                                                                                                                                                                                                                                                     {0.393, -0.06, -0.5, -0.273, 0.06, -
  {0.273,0.107,0.315, 0.393,0.227,0.435},F
                                                                                                                                                                                                                {-0.227, -0.06, -0.477, -0.107, 0.05, -0.357}, F
0.393}, Flip zs to pos?F
                                                                       {-0.06, -0.06, -0.315, 0.06, 0.06, -0.255}, F
                                                                                                                                                                                                                                                                                                                                                           {0.107, -0.06, -0.393,
                                                                                                                                                                              {0.273, -0.06, -0.352, 0.393, 0.06, -0.232}, F
0.227, 0.06, -0.273}, F
                                    {0.44, -0.06, -0.31, 0.5, 0.06, -0.19}, F
                                                                                                                                                                                                                                                                                                                        \{-0.5, -0.143, -0.393,
                                                                                                                                                                              \{-0.393, -0.185, -0.393, -0.273, -0.065, -0.273\},\
0.44, -0.263, -0.273}, F
                                                                                                                                                                                                                                                                                                                        {-0.06, -0.227, -0.232,
Another three high neg ys too neg z flip!F
0.06, -0.107, -0.353, \{0.107, -0.227, 0.19, 0.227, -0.107, 0.31\}, \{0.273, -0.227, 0.148, 0.273, -0.227, 0.148\}
0.393, -0.107, 0.268, \{0.44, -0.393, 0.023, 0.5, -0.273, 0.143\}, \{0.273, -0.393, 0.065, 0.393, 0.065\}
0.393, -0.273, 0.185, \{-0.06, -0.352, 0.107, 0.06, -0.232, 0.227\}, \{-0.227, -0.31, 0.107, 0.06, -0.232, 0.227\}
  -0.107, -0.19, 0.227}, {-0.393, -0.148, 0.107, -0.273, -0.023, 0.227}, {0.273, -0.5, -
0.06,\ 0.393, -0.398, 0.06\}, \{0.107, -0.476, -0.06,\ 0.227, -0.356, 0.06\}, \{-0.06, -0.435, -0.06, -0.435, -0.06, -0.435, -0.06, -0.435, -0.06, -0.435, -0.06, -0.435, -0.06, -0.435, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -0.06, -
0.06, 0.06, -0.315, 0.06, \{-0.393, -0.268, -0.06, -0.273, -0.148, 0.06\}, \{-0.5, -0.107, -0.107, -0.148, 0.06\}
0.06, -0.44, 0.013, 0.06}, most negative x, second down from the middle of y.
Raise. To really \{-0.06, -0.5, -0.227, 0.06, -0.398, -0.107\}, close to the middle.
Oops, wrong one, right height. Done. {-0.227, -0.477, -0.227, -0.107, -0.357, -
0.107, \{-0.393, -0.435, -0.227, -0.273, -0.315, -0.107\}, \{-0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.393, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5, -0.5
0.273, -0.398, -0.273, \{-0.5, -0.477, -0.393, -0.44, -0.357, -0.273\}z 1, 2, 3, coming
back from max z gotta be raised, lowered and lowered standard 0.0416, at second
  lowest x, they're to the mid z.3:29pm The frequencies of operation make it seem
 like entering the password (following each loading to double-check the regnodes
were correct), is a lot similar to the mining actions, if for some reason,
mining actions weren't exactly about applying force but rather about improving
accuracy. Finally I can actually make a gyroid in here and see if it's big
enough to walk in. But since the spiral staircase is also only just big enough,
I'll have to go goblin- sized anyway.9:-7am 13/May/2024 Easyporter-master is
being added and maybe should be using the 'hui' texture, to fit the old idea of
having them activated with glowing, It would be nice to have them switch on or
off, and for their state to be indicated by glowing or not glowing. The
easyporter as I tried it yesterday is one-way, but many-to-one and grouped by
 identification with an adjacent node that is the same for all easy-porters in
the group, including the output portal. I want to change this to the node below
the porter, and make the porter like a sticker or gem that goes on top of it, so
for instance, a group of them is identified by the appearance of the runestone
or step that has an additional marker. Also I want to use the particle effect of
 the magic mirror on this one, and I'm only using this one. So to do: a new
  texture and obj for the 2 porters, grouping by node type beneath rather than the
4 around, and reusing a particle effect from another mod.9:31am Looks like the
```

'node points' lines at the beginning of util.lua are the ones to change for job #2. Gonna change and check now. 9:33am Works. Easyporter is wonderfully simple, with the database a simple list of coordinates in a .json file in the world path.. Changing node timers from 0.1 to 2 at the top of the porter-in file to see does it incur small delay during or before port. Also tweaking so that player is ported to point 5 units higher than the out-port and the activation radius is lowered from 0.8 to 0.1. I see the texture is defined by a single tile, but will use a mesh. What about blackpool? Something like it maybe... Well, don't know why but maybe it's cos the activation radius is too low so I'll return it to ... no it's gotta be that they're activated by the player being 5 units bove the portal in. nope. Or should Ihve waited two seconds? Try these changes one at a time for clarity! Yeah, time delay is as seems and easily changed. 2 seconds should be proper. And the offset means that the portal can be a gem inset into an arched gate, with any chosen range, and delay. I think I'll do them in pairs then. If I use two versions of the portal, with different offsets, I can emulate the portal from minecraft, which has a delay of about 4 seconds. By using one portal at the top and another at the bottom of an arch, but having the meshes thin so that they only take up the space the player enters, the portals can be two-way, or even cyclic, which might be better. Is there another way to defing portal group? The out-portals are overhead and the in-portals are stepped on, but they are to be found together at an arch, so using a negative value for y in the 'tp-to-portal' function in util.lua, I believe I have set the output location to be below the out-portal gem. But is there a way to do it with just two pillars? How about blue flame? Since the portal is activated by the snoo powder in HP which turns fire blue. Ideally, blue fire stays blue for a short time, and turns red. The portal node should be a decoration above the fire but in the fireplace, and port to another blue flame, so let's have that a blue flame only turns red a little while after some player has passed through that node. 10:18. Later. 1:21 played piano. line 125 to 152 returnmirror/init.lua.... going to use hui rune. Should be scope would work WITH the teletool. 2:05pm Should have unlit rune goes to lit rune. Not using dice, unless don'T mind adding another? Then runes require something below them that is the same. Would be nice then to use blackpool as a red gem instead, and as in-portal, with dice as out-portal. Want all runes identifyable? Nah, keep em seperate... I could have the portal activation zone large, and beneath the floating island of Winde, and last long enough so that no matter how player falls, always ends up at respawn point. Is that a good idea? <nods>. We'll see though, gotta just get blackpool to dice portal tested first. 2:32pm ok, have mirrored, or parrotted, the easyporter into the 'tool' mod folder of RSWO minimal, with 'easyporter' changed to 'tool' in function definitions, and blackpool and dice taking the place of portal-in and portal-out. Reduced area of blackpool. There was a 'failed attempt to index local 't', a nil value, but I looked at the init and found there was no 'tool = {}' thee. Fixed. 2:40 well it says 'set portal:hui' but no teleport yet. Whoops, clumsy me, forgot to change y to positive again, since these are runes for standing on, not as part of an arch portal. Wouldn't want to be dropped into the abyss, now would we? :/ ... Well, it worked, after some jumping... What about having the blackpool be kind of green and shoot sparks? I'll use the candle texture from TJ. 2:55pm But Ihave to find it. Later. Or I'll just go in and check. It is default:torch, there. It goes out after less than a minute, it would be great if the portal was only active that long after being placed. If I'm using floo spew it should really be output, and dice input. It turns to real\_torch:torch. Maybe blackpool should turn to 'air'? Then it should stay as input. Either it's input and turns to air, or it's output, in which case: how is it placed? Ideally, it's input, turns to dice, and the output, dice, turns to blackpool, which has a node timer that turns it to air. It turns to dice when used as input, and becomes an output, and vice versa, but it's like a whole week of work and I don't know if I can cos I've a sore back even though that's perfect, and I can see how it would work... So I'm just making it look like fizzly torch, but bluey green. Anyway I guess I'll switch dice to input and blackpool to output, which kinda makes me look evil, but it's just because.... ok, I'll try node-time the blackpool to air sometime when I have time, but,

I'm just switching their roles for now. Ok, fixed. I know: I'll reverse the direction of the smoke effect, making it look like it's being 'sucked'. 3:55pm

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done. 14/May/2024 7:42pm I quess I'll try and do some mathematics. Hmm I've
decided the job is to map out the bed locations and orientations for a complete
cell of the gyrominoes, using the excel datasheet for Tinny Jangle but later....
17/May/2024 8:14am half R5/2 + skewslab half for bridge banister. 12:44pm added
to r5/2 bridge, drew half dozen hypothetical pngs, would Iwant an 8th pg. Wish
to make bush invertible. 7:37am Saturday 18th: Changing shrub paramtype2 from
'meshoptions+ to 'facedir' so I can turn it upside down and make it visible
roots. place_param_2 was 4. paramtype2 = "meshoptions",place_param2 = 4,
Reverted. 7:44. Noticed Jel faces player. Could easily do that the mobs hold
staffs and the staffs are the only interactible things. Can't see difference
between sprites that seem to face player and those that don't, not in the
sprites.lua file. 9:44am removed scaffold, R52 bridge has rune portal and snakey
banister pot.12:22am played piano and ready to try animating a mesh using
animated textures for the vts in an obj. See the runes use animated textures,
now I just have to find out if mesh based nodes can use them, then it's a matter
of creating multiple intersecting (ETA: 2 hours) closed volumes which take an
opaque subsection of the texture (which will be a double-sized one with a blank
area, perhaps in the middle) for a subset of the frames. I'll start simple with
an experiment: using a 32x32 animated texture for a basic model 12:27pm.
12:40... The pedestal animates a 'weilditem' visual, but that isn't a drawtype
in the mod book. Just thought of a fountain type thing, the color within could
obviously be animated, and it could be really simple to start off. Do I want to
do a fountain shape? like a bowl but using a blue texture inside, or do Ijust
want to go and get an actual glass of water in real life?...9:02 forgot
animation but looked at sun... after several hours of the screen and judging the
whole thing. Yeah, I don't know, ya know, it's a long way to Kansas.9:27am Sun
19th The arches clipped but circumcentral approximations made in z/16s, so the
vns are simple roots, and it's smoother: ETA:1.2 hr each.21/5/24 8:32am along
the (-x,y) plane it goes: 0,0
                                    1,4
                                                            3,8
                                                2,7
                                                                         {4,10
                  6,12} 8,13 9,14 12,15 16,16 in sixteenths.
      ≠5,11≠
                                                                   8:52am png
done, 22 vertices. so what are these in decimal?
{1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16}/16 = {0.0625,0.125,...} Oh wait I know
these already :). 9:=5am started stitching three faces at a time like this: vt 0
1vt 0 0vt 0.0625 0.25vt 1 0vt 1 0.2577vt 0 0.2577vt 1 1vt 0.9375 0.25vt 0.125
0.4375s offf 21/1/1 1/2/1 3/3/1f 1/2/2 2/4/2 4/5/2 3/6/2f 22/6/3 4/7/3 2/4/3f
21/1/4 3/3/4 5/8/4f 3/... but because the heights are actually different for the
slopes and the vertical sides as you go around because the slopey height is what
is meant by 'height' is the surface distance so it's a bit more and when you
have them listed together it's not actually much easier than doing each type of
surface seperately (There's more similarity to connect adjacent figures). So,
using a calculator, \{\sqrt{17/16}, \sqrt{10/16}, \sqrt{2/16}, \sqrt{5/16}, 2\sqrt{2/16}\} =
{0.2577,0.1976,0.0884,0.1398,0.1768} and cumulatively from the bottom edge of
wrong way around- it's:\{0.8602, 0.7719, 0.5742, 0.3165\} then for the 2√2 which is
2.8284... just use three pixels and go up from the top edge of the middle strip
with {0.1398,0.2281,0.4258,0.6834} and I guess take the middle strip from the
bottom and remember the lower strips are in reverse order to the way they're
listed. 1:10am all's left is the vns. \{(-4/\sqrt{17},-1/\sqrt{17},0), \text{ all the zs are 0, } (-4/\sqrt{17},-1/\sqrt{17},0)\}
3/\sqrt{10}, -1/\sqrt{10}), (-1/\sqrt{2}, -1/\sqrt{2}), (-2/\sqrt{5}, -1/\sqrt{5}), -(1/\sqrt{2}, -1/\sqrt{2}), (-1/\sqrt{5}, -2/\sqrt{5}),
(-1/\sqrt{2},-1/\sqrt{2}), and the rest, you know...10:22am obj done, now to sort of halve
the sel/col boxes. whopper cool, but 10:29 two textures inv. No just didn't add
them. 10:33 added. Just want to reduce by 1/32 toward nearest edges. Done
10:37am4:41am 22/5/24 vertices for acro done.4:55 for slopey sides pixels
outward from top and bottom edge of middle strip, with having them sort of
converge to unity. I thought there would be a need for compression due to some
R2 plane but no.{0.3165,0.5742,0.7719,0.8602} v{0.1398,0.2281,0.4258,0.6834} ^
The coordinates of vertices on the four lower and upper edges of the slopey
section, going in +y direction. But note it's not along the diagonal, but
actually the arch interpolate, those /16s. 6:00am trifracs and vts done. vns are
same as for arch. 6:13 arco: rendered somethin funny above. Somehow it's all
curved inward. No vertices are given greater than 0.5 y value coordinates, but
it looks like it goes up to about 0.9, and the two flat sickle shapes are curved
towards a point that high above the centre. The curving is regular though. The
slopey sides have only a couple faces skewed in texture but the back flats are
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busted. So first do the odd repair in the slopes' textures. Ah! 6:29 29th vertex
added. So that's what happens when a vertex is missing. It looks ok really, it
has character. 6:32am. Looking at the sel/col boxes for arco I'm seeing the z
values go pos to neg reading left to right. Iguess it works that way too? Fixed.
 'Ya gotta thin the top one by half and raise it by half'. Bringing the sel/cols
 toward the surface as much as I can while keeping the rationals low. 6:49am Arco
done.9:27am already started labelling them face-wise, rather than by altitude.
Keepin it. Then again no harm changing it if I can. Changing it BACK isn't
really changing it though, it's a... kind of a local change but global
conservativeness. 9:31 done. 10:26am done. arco was useful for copying (with a
slight re-ordering) the vns. 10:30 well it's wierd lookin. 10:34 was missing top
vertices, fine now with a smudge here and there that adds some character. 10:#5
again, in sel/co.s flattening it towards the flat faces half a 16th in three
directions: x,y, and z. 11:07 we5ll see what the modified nodeboxes look like,
then we might get rid of them altogether. Well, it's done, and I suppose nb
 remains as an historical expression, if a little overly visible in the code, I
 suppose it's easily fixed in some other word proccessing method. Now to alter
the .obj for arch to fit the half-width model for arch. 11:27 saved copy of arch
as arsh on Desktop. Just bring all the negative 'z's to zero. change vts from 0
to 1 for the slopes. move arsh to model folder. 11:38am I suppose next is to fix
the other spiral staircase step. spirout_l. later.2:10pm found spirout_l.png now
 to check the obj for spirout_r and see if I can find those coordinates. See if
the vertices are labelled correctly. ETA: 6mins.2:14pm yes. See if at least the
vertices correspond exactly to the faces. ETA:5mins. yes. 2:19. vns are good.
alls left is to observe the texture mapping. ETA: 10mins. 3:24pm when sel/col
boxes are set to what was the nodeboxes and the obj file is made correspond to
spirout_l, the actual game doesn't load. I'm opening it up in mousepad twice to
compare it with spirout_r, which is perfectly fine. Opening sto3.lua, that
is.3:30pm Have looked through it. No real stand out difference. So looking at
the .objs for spirouts. Two extra vts in left. Why?... At the risk of being a
bit ignorant, I'm going to suppose it's because when Igot to the secong set of
steps, I just found that the textures had to be plucked from an area that was
demarked with just that few more vector points than previously... Nothing stands
out as reason for the shutdown- a few textures have routinely glitched out
without such a major failure. It is weird. IF there's a problem or mistake
somewhere in the vts, MAYBE I could go back through those 19 trifracs and pick
it out. I would rather do something else, like redo it in faith that there'll be
no issue, as is expected when beginning things again from scratch on computers.
It's a bit longer, but a more 'comprehensive' experience of work, more wholesome. While the problem remains however, I'm going to consider taking the
ugly thing out altogether and making do with a regular shaped one, that is one
 that fits in the unit nodebox. Or heck, I'll just make one of those 9 new ones
 sitting in pngs on the desktop. Removing the nodereg from sto3.lua. Search ->
find unresponsive. 3:47pm.minetest.register_node("stones:spirout_l", {
                                                                                                                                                 paramtype = "light",
                 description = "Spiral Step-Out Extd Left",
                paramtype2 = "facedir", tiles = {"rock.png"},
                                                                                                                                                 light\_source = 0.1,
                 groups = {cracky=3, oddly_breakable_by_hand=0}, drop = "stones:spirout_l",
                 selection_box={type="fixed",fixed={{0.4375,-0.5,-0.5, 0.5,0,0.5},{0.375,-
0.5, -0.5, 0.4375, 0, 0.375, \{0.3125, -0.5, -0.5, 0.375, 0, 0.25\}, \{0.25, -0.5, -0.5, 0.375, 0, 0.25\}
0.3125, 0, 0.125, \{0.1875, -0.5, -0.5, 0.25, 0, 0\}, \{0.125, -0.5, -0.5, 0.1875, 0, -0.125\},
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As a glowing pilot light that can be affixed to a wall-like safety support. It's good futuristic municipal stuff this. It would be nice to have a speed limit, and have movement through it behave like ice surface, with sliding. So... first I'll set the small red star thing to climbable. Then make normal rock slippery = some integer to test the inertia sense. 18:03pm The stones have been set to climbable, but I'll also make Estruck climbable if I ever go with that. Undoing: it should be a unique, somewhat invisible node. How about firefly? Or.. this is crazy, but what about just making 'air' climbable? 18:13pm went builtin -> register: Line 351 climbable = true on core.register\_node(":air. Didn't seem to work though so changing it back, as well as the little red star climbability. It occurs to me that anything can technically be altered. My brief experience with updating something playable suggests core changes would simply entail more 'folder replacing' as well as, obviously, a lot of work I won't do. 18:19pm ok it's cancelled back. I should make the half arch and full arch climbable, as well as the hollow slab and hollow 3-side and two-side slabs climbable, maybe with an extra texture. But it's the near opposite of what I intended: an invisible passageway going vertical, indistinguishable from air, so that the surroundings can be decorated with anything else, perhaps a kind of animated central thing with a larger range of influence would do it. In any case, since the current update is final enough, I can start adding pages if I like. On the other hand I've been telling myself not to work at all, just to take it easy because I tense up a lot when I start calculating the workloads, and it is pretty stressful, because the coding is something you kind of don't want to know very closely since it's kind of antisocial language. But I'll do something.18:25. 19:05 half arch 'arsh' works fine as a climbing ladder with all round safety support, but I'll add a red line through the middle of the texture will I? Does it crop up anywhere else? Ah I'll leave it. Something though? don't know.21:53pm added hoverflue ribcage with three outward intersections, at different heights to Winde, and three plant tendrils, with the base of the arch floater the niu bi da xue emblem. Hella cool.5:52am Saturday 25thMay2024 arsh texture shadowing bloop. It's the face that faces north in param 0, number five in the tiling sequence. It occurs to me that schools, the way they have been, yeesh, imagine what it could do to your knowledge. You have to cos you don't know. Anyway let's continue the waffle. No, no, it's fine, you ain't waffling, it's just a different medium for expression of slightly more ephemeral and wispy thoughts. Not like the lecturers zooming through the history of buddhism with a 10 minute introduction to their names for posterity. So I'll first check the vn, the normal vector to the north facing side, make sure it's positive z. And arch has same bloop so I should compare. arci doesn't. 6:14 the faces are accidentally defined in reversed orientation, to be permuted. arsh fixed. 06:21 lookin good. 6:41 gotta make it so that when NOT in creative mode it takes ages to bust the blocks.7:55am 26/5 arsh could be forked to ones with angled perfofaces. I guess there's four to collect. And four. Eight.Arschol for 'arch complete to slim outer left' obj spliced from arsh on desktop. On the r5/2 slope, points of curve to be moved half their distance to the rear support plane. That's x=0.5. And out means added negatively to z=o, where it would have been. 8:28am done. Then it's all the sloped faces given R5/2 vns. That's (0.4472,0,-0.8944) for arshcol. Just all faces that intersect the adjusted curve: {3,5,7,9,11,13,15,17,19}, with twice as many faces as vertices plus the top one too. Don't care about the vts for the slope, but the inner curvy face can have progressively wider coords going up the arshcol. This is considerably easier because the vts were split for the first and second set of faces respectively. So all I gotta do is increment the vts a bit and for the second group only. Same differences as were applied to the vectors above in the obj

file, subtracted from the x coords of the group of vts, which would have all been 0.5. 8:40am. 8:50 arsh should have more vts where vt: 0 0 was used extra times. 8:53 arschol done. Right shape. Forgot top texture, and should fix that vt 0 0 thing. And didn't do the vns either. ETA 10mins. 9:07 textures came out blank grey for those altered ones: because the vts were given numbers exceeding the index limit: I thought there were 50, there were only 40. 9:10 so for the sel/cols whatever the x distance is from the reaer support face, it's half that deducted from the z value to make the minimum x+z vertical edge of the sel/col box intersect the R5/2 face, which may be the cleanest look, recalling hex. 9:18 removed top covering sel/col and raised them, but one is subsumed, funny, and want to draw them all out a wee bit anyway. 9:22 oops went wrong way, now all subsumed. 9:31 reduced each sto .lua to rough maximum of 1000 lines, increasing number of files from 3 to 5. Should be given table of contents file in txt format. Accidentally closed the notepad and had a look in the game, since reopening from game folders doesn't work sometimes, and I was examining a case of a duplicate labelling that can be elucidated by 'going in'. Then I saw the 'unknown' moss everywhere: the new files sto4.lua and sto5.lua should be referred to with a dofile in init.lua. The '/' in Brush+Rock 1/3 should have a '\' counterpart. 10:21 Contents.txt, a complete list of stones, done. 10:35 mcl\_cozy\_.... requires player physics mods, should get. flying\_carpet could be made into a flying broomstick, and more flexible. 9:30 27/5 Ok so did arschol yesterday, doing arschor today, or arcshol or arcshor. Arcshol, the Arch to Shallow left. Dist from back is halved and brought in from edge. 10:48 two done. 10:'3 wierd, two vts list '0.5447 and 0.7423' instead of '0.7719,0.8602' yet the visual's fine. 11:12 accidentally saved it to arch instead of arcshor. undoing 11:14 undone. Arcshor done, but for sel/cols. 11:21am done. Shall add corresponding lowhalfs of these. But I'll put them in sto5.lua rather than sto1.lua just because its reached the 1000 clutter limit. So starting with arcshol, the high zs stay and the low slopey zs have 0.5 added, nd that's it. done, and a duplicate vertex was removed at the end of it, but for arshcil it won't be easy removing it at the start, because all the rest would have to be re-indexed, so there's no bother leaving a 'pointless' duplicate vector there. 12:47 all 8 arc variants added now. It's not too much strain on the menu to keep adding new blocks as long as I know what I'm doing 15:42pm 29/5/24 Should ensure sel/cols only intersect surfaces and don't protrude. ETA:1.5 hours. Gytul/r could also be made voluminous. ETA: 50mins. At least I extended the bridges, want them straight, because they lead to a central portal exit, yet highways are generally straight anyway: I mean, there isn't anything in the way for now, is there? A few things that could be in the way: mountains, rivers, cities, monsters, lakes, dinosaur caves, alien ships, swarms of giant insects, a big wall, flesh eating plants, atom bombs, a castle.19:12pm making nbdx internal faces animated rybble. They're nodeboxes, so could do some chipping. 19:39 After a patch paint job got deleted on an overheating pinta run, I'm not going back there today. Looks like the originals are the blockiest.10:22 30/5/24 extended NE bridge to ruins ETA 1hour. Making Flat K, L, U, O climbable.

8:30pm 01/June/24 Back to TJ, making can pour milkman's milk from official milkman's milk bottle to regular bottle, from which should be drinkable, and back again, with the official milkman's milk bottle standable. ETA 14 mins. 8:43 done.

20:31pm Hume's minesweeper mods is great, should be improved. No updating thus far: must be hard. I could see an overhaul of mining in TJ with the number neighbours dissapearing on excavate, and the hazzar-buzzers they indicate being the only acquireable nodes, gotten only through flagging first, with item loss and damage risk otherwise interacted with. The generated spectrum need not be altered for this to be interesting: You still have to be lucky to mine gold. The numbers could be an overlay over the others, with even a randomizer thrown in to make it super hard but probably I wouldn't go further than making a random number of number-node faces unrecogniseably different, or faded or something. 20:38 4/7/24 let's see how dense a neighbourhood I can excavate in this helluva 3d minesweeper game as it is.

14:46 25/6/24 Adding '1' as element in set from which math.min chooses on line 110 of shadows/init.lua. Did not change 'nil' error, searching for first definition of transparency. 'Id' 15:04 de-caged s\_52l. 15:11 sku\_20. 15:36 diagsteps. 15:43 diagsteps\_31. 15:48 s\_222. 15:52 brushrock\_527r (and l, earlier). 15:56 s\_52. Contents.txt is useful here, but although it would be more efficient in some ways to run through the list as laid out in contents.txt, it is more comfortable choosing elements of the model garden and smoothing the edges piece by piece, though a final double check is expected, also to have (somewhat arbitrarily, like the single space in the middle of the six ordinates designating the selcol boxes) the selection\_box numbers listed first, then the collision\_box ones, as the selection box ones alone permit immediate rendering of changes. 16:00. 16:05 sku. 16:10 s\_52hul. 16:20 estruk. 16:26 s\_22. 16:34 diagsteps\_8r. 16:43 diagsteps\_8l 17:10 s\_52pr 17 down to 7 lines for selcols. 17:13 s\_2. 16:18 s\_52u

16:06 26/6/24 vsect resurfaced. 16:13 brushrock\_52ul.... 17:24 diaq. 17:29 spike. 17:32 brushrock\_22. 17:42 sku2\_r and l. 17:46 s\_22l 17:48 s\_22r. 17:51 brushrock\_2u 17:59 next asect. 18:19 asect 18:31 asect\_2, 2u, selcols carrying the spacings of s\_2 and s\_52.

18:37 for aset there's a fermat  $\Delta$  of 15 outcropping that encompasses a  $\Delta$  of 9 volumetrically circumscribed, to bring this up to 15, 15 goes to 28, that is the spacing lengthwise is in 1/7ths instead of 1/5ths. 0.142857

Instead of  $\{-0.5, -0.3, -0.1, 0.1, 0.3, 0.5\}$ ,  $\{-0.5, -0.3572, -0.2143, -0.0714, 0.0714, 0.2143, 0.3572, 0.5\}$  but not gonna use the ones that jut out of course.

7:45am June30th think it's sleeping 8:05 apex Inset resurfed. lowhalf is half the zs height.  $\{-0.5, -0.4286, -0.3572, -0.2857, -0.2143, -0.1428, -0.0714, 0\}$  08:14 aset\_2 done. 8:20 on to diagstep. 8:28 diagstep done. 8:39 hexar gets aset's selcols. 8:47 8:52 next hexp. 9am 9:22 hexar related stuff done. 9:37 s252l 9:47 both l and r. 9:52 9:58 leaving s\_3 unfinished, vr\_2 can be done first and combined.

10:26... 10:33 Or continuing s\_3's aset pattern' cooler because it's 5s and enough really. 10:46 Just patch. selcols for vr\_2 alone number 10:51 good enough

11:14 s\_52pl 11:26 sku3\_l 11:30 sku3\_r and sku\_202 is half sku\_20 so the operation's a run down of Ys. 11:39 next is skud. 12:11 messy, like a skorl's club.12:28pm vr done but with 73 selcols. 12:37 top half done too. 12:41pm That's it! Forgot octa. 12:47 done. Isoma's missing textures. 12:49 Fixed.

5/7/24 1:28am wanted to put 52high, the banister for a R5/2 steps next. 2:00 being as it's the middle of the night, I'll just make a suggestion- do spirout\_l next, or whatever way it's coming, if some more are being added, it should be priority, just because seeing as the one of them looks good, the both should be better,right? But then again, some things in life are just like that: you've only the one enantiomer.

7:54am 13th July 2024 loaded 30 of 32, labelled 1 hexadecimal f, as the stone 's\_s', which was the

first, the harbinger which sprung the idea of a set, works for both left and right R5/2 Dstep edges. Correcting texture glitches on unsel/colled renderings. '8-cycle R5/2 Diagstep RF', or stones:c8rf, missing one face texture. 8:00. 8:04 fixed. 8:05 c8ra misshapen. 8:17 fixed switched vertices and duplicate mapping. 8:20 on c8r3 a pair was shifted to neg z but otherwise whole and mapping is coherent, which makes me realise that any four vertices can be texture mapped fron a quadrangle producing a covering of two triangular planes in rendering. It's a cool block in itself, I'll keep the glitch as a copy: c8r3e. 8:26 fixed. removed c8r2 since it's just s-s. lined r1, s-s and r3 but steps appear to have long diagonal spacing, greater than prototype lengths, ignoring. 8:33 c8ld webbed up. vertex 6 was mapped to 8 because of ambiguity interpretting the diagram. faces 2,7, and 6. face 6 had a typo duplicate 8. 8:38 fixed. Ignoring minor smears and that sort of thing. c8la missing a texture. face #10. 8:42 fixed. 8:43 c8l9 lower vertex bunched up. 8:45 fixed, big smear on face #2. 8:48 c8l8. diagram labelling interpretation errors: I read a face-label as a vertex label, and two closely located symbols led to a different vertex being taken in trifracs. 6 for 7 on face #2. 8:53 fixed. 8:54 c8l5. Just vertex input 0.2 neg x from where it was supposed to go on vertex# 9.8:57 fixed. c8l4 missing texture mapping, adding face #12. 9:00 done. c8l3 single face repair. no, 2. #11 face is quadrangle , diagram failed to elucidate, adding trifrac for vertex #2. Added underside vt for the odd vertex that isn't a regular corner, '0.4 0.8' and shifted two of them neg z, again a result of rushed sketching, which I'm not sorry for.

9:09 c8l2 missing the middle face of the step. Because it wasn't made. Skipped. Simple addition now. Am Iwrong to keep the old s-s label? 9:14 finally, c8l1 what's connecting vertices #1 and #6? Oops, I mean #2, not #6. No, #6 is right, #2 is the lower down one and #6 is the higher up one. Here, face #10 connects #1 and #6. trifracs had  $\{5,4,6,1\}$  instead of  $\{5,4,2,1\}$ . Next, face #9. should be {2,4,3} not {6,4,3}. Something missing there at the side. Don't know why {3,4,9,7} didn't bring it all the way back to 6 for {3,4,9,6}. 9:24 ok fixed. Adding section in table of contents. 9:30 Done. In fact, s\_s doesn't work for both left and right. It should just be renamed, shouldn't it? done. it was 'R5/2 Diagsteps Upper Left Pair'. I still don'T understand why I only have 15 of each if those s\_s-like ones were included. Looking at papercopy sketch. Must be in the ones going from 9 to f that one is missing. Each. OH! 9:47 those s\_s types do actually double up! I wonder will I relabel them then so that they're number one in the list. YEAH! ETA 20mins. 10mins, a simple shift down. Done. Now, will I shuffle them so that it's left right left right etc? 10:03 Of course! ETA: 13 mins... later It's alright as it is.

11:00 beginning the sel/cols. c8l1. 11:16 done. If you want to render while editing, do selbox first. large portions can be duplicated here. There are four types of sku / lowhalf:

```
low ls sku:
{-0.5, -0.5, -0.4375, -0.375, 0.5, -0.375},
{-0.5,-0.5,-0.375, -0.25,0.5,-0.3125},
{-0.5,-0.5,-0.3125, -0.125,0.5,-0.25},
{-0.5, -0.5, -0.25, 0, 0.5, -0.1875},
\{-0.5, -0.5, -0.1875, 0.125, 0.5, -0.125\},\
{-0.5, -0.5, -0.125, 0.25, 0.5, -0.0625},
{-0.5, -0.5, -0.0625, 0.375, 0.5, 0},
{-0.375, -0.5, 0, 0.5, 0.5, 0.0625},
{-0.25, -0.5, 0.0625, 0.5, 0.5, 0.125},
{-0.125, -0.5, 0.125, 0.5, 0.5, 0.1875},
{0,-0.5,0.1875, 0.5,0.5,0.25},
{0.125,-0.5,0.25, 0.5,0.5,0.3125},
\{0.25, -0.5, 0.3125, 0.5, 0.5, 0.375\},
{0.375, -0.5, 0.375, 0.5, 0.5, 0.4375}
11:29 c8l2 done. 11:38 c8l3 done. 11:42 c8l4 done. 11:53 c8l5 perfectly done.
12:01 c8l6 done. 12:15 c8l7 done, with even hidden fillings. I don't know if I
can maintain this standard. 12:19 c8l8 done.
13:03 lowhalf for higher ls:
\{-0.5, -0.5, -0.375, -0.4375, 0.5, 0.5\},
{-0.4375,-0.5,-0.25, -0.375,0.5,0.5},
{-0.375,-0.5,-0.125, -0.3125,0.5,0.5},
```

```
{-0.3125, -0.5, 0, -0.25, 0.5, 0.5},
{-0.25,-0.5,0.125, -0.1875,0.5,0.5},
{-0.1875,-0.5,0.25, -0.125,0.5,0.5},
{-0.125, -0.5, 0.375, -0.0625, 0.5, 0.5}
13:10 c8l9 done.
sku for l upper digits:
\{-0.4375, -0.5, -0.5, -0.375, 0.5, -0.375\},\
\{-0.375, -0.5, -0.5, -0.3125, 0.5, -0.25\},\
{-0.3125, -0.5, -0.5, -0.25, 0.5, -0.125},
{-0.25, -0.5, -0.5, -0.1875, 0.5, 0},
{-0.1875, -0.5, -0.5, -0.125, 0.5, 0.125},
{-0.125,-0.5,-0.5, -0.0625,0.5,0.25},
{-0.0625, -0.5, -0.5, 0, 0.5, 0.375},
{0, -0.5, -0.375, 0.0625, 0.5, 0.5},
{0.0625, -0.5, -0.25, 0.125, 0.5, 0.5},
\{0.125, -0.5, -0.125, 0.1875, 0.5, 0.5\},
{0.1875, -0.5, 0, 0.25, 0.5, 0.5},
\{0.25, -0.5, 0.125, 0.3125, 0.5, 0.5\},
\{0.3125, -0.5, 0.25, 0.375, 0.5, 0.5\},\
\{0.375, -0.5, 0.375, 0.4375, 0.5, 0.5\}
13:26 c8la done. 13:33 c8lb done. 13:41 c8ld done. 13:48 c8lf done. 13:56 c8lc
done. 14:03 last of ls done.
2:56am 14/7
low rights:
\{0.375, -0.5, -0.4375, 0.5, 0.5, -0.375\},\
\{0.25, -0.5, -0.375, 0.5, 0.5, -0.3125\},
{0.125, -0.5, -0.3125, 0.5, 0.5, -0.25},
\{0, -0.5, -0.25, 0.5, 0.5, -0.1875\},
{-0.125, -0.5, -0.1875, 0.5, 0.5, -0.125},
{-0.25, -0.5, -0.125, 0.5, 0.5, -0.0625},
{-0.375, -0.5, -0.0625, 0.5, 0.5, 0},
{-0.5, -0.5, 0, 0.375, 0.5, 0.0625},
{-0.5, -0.5, 0.0625, 0.25, 0.5, 0.125}
{-0.5,-0.5,0.125, 0.125,0.5,0.1875},
{-0.5,-0.5,0.1875, 0,0.5,0.25},
{-0.5, -0.5, 0.25, -0.125, 0.5, 0.3125},
{-0.5, -0.5, 0.3125, -0.25, 0.5, 0.375}
{-0.5,-0.5,0.375, -0.375,0.5,0.4375},
{-0.5,-0.5,0.4375, -0.5,0.5,0.5}
that's the sku. 3:10 r2 done.
Here's the stand-up bit, the r52 lowhalf for low rs.
\{0.375, -0.5, 0.0625, 0.5, 0.5, 0.125\},\
{0.25, -0.5, 0.125, 0.5, 0.5, 0.1875},
(0.125, -0.5, 0.1875, 0.5, 0.5, 0.25),
\{0, -0.5, 0.25, 0.5, 0.5, 0.3125\},\
{-0.125, -0.5, 0.3125, 0.5, 0.5, 0.375},
\{-0.25, -0.5, 0.375, 0.5, 0.5, 0.4375\},\
{-0.375, -0.5, 0.4375, 0.5, 0.5, 0.5}
3:26 3:38 r5 done. 3:45 r6 done. 4:00am c8r8 done.
8:05am 14/7
final r{9-f} of 8-cycle has lowhalf
{0.4375, -0.5, -0.375, 0.5, 0.5, 0.5},
\{0.375, -0.5, -0.25, 0.4375, 0.5, 0.5\}
\{0.3125, -0.5, -0.125, 0.375, 0.5, 0.5\},\
\{0.25, -0.5, 0, 0.3125, 0.5, 0.5\},\
{0.1875, -0.5, 0.125, 0.25, 0.5, 0.5},
{0.125, -0.5, 0.25, 0.1875, 0.5, 0.5},
{0.0625, -0.5, 0.375, 0.125, 0.5, 0.5}
{0.375, -0.5, -0.5, 0.4375, 0.5, -0.375},
\{0.3125, -0.5, -0.5, 0.375, 0.5, -0.25\},\
{0.25, -0.5, -0.5, 0.3125, 0.5, -0.125},
{0.1875, -0.5, -0.5, 0.25, 0.5, 0},
```

```
\{0.125, -0.5, -0.5, 0.1875, 0.5, 0.125\},\
\{0.0625, -0.5, -0.5, 0.125, 0.5, 0.25\},\
\{0, -0.5, -0.5, 0.0625, 0.5, 0.375\},
{-0.0625, -0.5, -0.375, 0, 0.5, 0.5},
\{-0.125, -0.5, -0.25, -0.0625, 0.5, 0.5\},\
{-0.1875, -0.5, -0.125, -0.125, 0.5, 0.5},
{-0.25,-0.5,0, -0.1875,0.5,0.5},
{-0.3125, -0.5, 0.125, -0.25, 0.5, 0.5},
\{-0.375, -0.5, 0.25, -0.3125, 0.5, 0.5\},\
{-0.4375, -0.5, 0.375, -0.375, 0.5, 0.5}
8:30 on to rc.
low l lowhf
\{-0.5, -0.5, 0.0625, -0.375, 0.5, 0.125\},
{-0.5, -0.5, 0.125, -0.25, 0.5, 0.1875},
\{-0.5, -0.5, 0.1875, -0.125, 0.5, 0.25\},
{-0.5, -0.5, 0.25, 0, 0.5, 0.3125},
{-0.5,-0.5,0.3125, 0.125,0.5,0.375},
{-0.5, -0.5, 0.375, 0.25, 0.5, 0.4375},
\{-0.5, -0.5, 0.4375, 0.375, 0.5, 0.4375\}
9:00 one left. 9:09 done rf. menu is 9 and 2/3 pages, but this addition rocks.
There are some more in the uncut folder, and this array split method has
promise. There was no change to the build here, only the menu, but I'm thinking
of replacing the 'underworld staircase', with those protruding concrete
tendrils, with a more 'polite' R5/2 Diagstep.
```

15/7 9:30 since 8am, added three: the diagsteps 52 'S' and 'Z' and still have sel/cols to do for dias52r, then some similar smoothers for the banisters.

13:07pm 5 objs done to fill 9th pge. 13:34 rendered ok.
14:47pm siding B done.
15:54 crashed there twice, something in selcols most likely. Just on dias52r.
Yeah it was a decimal missing went from 0 4375 to 4375 big difference!

Yeah it was a decimal missing, went from 0.4375 to 4375, big difference! 16:47 models, sto5.lua and contents were updated, so it's an even 9 pgs. That's good for now (Didn't even build anything yet!) 16:52 snapped them for collage.

## 24/7 22:34pm

Isokar is proof that animated texture works with arbitrary meshes. I was thinking grass that protrudes in maybe five double sided raised strips for the brush, and lesser amounts of such for its variants, but minimal, clumps, maybe a few stalks that have chains of gradiants, but it's too much work at this stage unless there is special arrangements to be found in the art of it.

What about a three petalled windmill? The texture sheet would be large, with a different strip taken for sampling per 16 frames, the rest opaque resulting in no rendering beyond the configuration allotted the windmill at a given moment. But I would rather do this with a hypercube! It could simply rotate. Thing is, all possible instances would be sketched to a resolution of about 16, or 8, or whatever isn't crazy workload, and the texture map has to be an animated collage. It seems counterproductive, like, why not have the animation frames correspond to the instances of the object, but that's how it adds up- everything is there.

Ok that's two great things were they to be added, but a third one is this: An hourglass, that has the sand go from top to bottom before turning and resetting, probably lasting about a minute (check the solar system model for exact time).

I should examine the clocks mod I recently downloaded for tricks, I know they're there!

A rotating Ankh symbol. It could glow gold without need for any more than four pixels per frame, that cycle through the lot, but how many faces is that? About 40x16= 640, such overkill for something that's gonna look easy.

Of course, water waves are a curiousity, if doable with a minimal number of

faces and frames. I sort of wonder what it would look like on a big scale to have loads of gyruls and gytuls (the gyroid transational cells) in checkerboard connection on a plane cycling through alternative orientations.

There should be two types of wavey surface whose boundaries are compatible in checker-board style. a depth of 1 is sufficient, and the waves need not be tall. With no sel/col issues it could be a right job, waves. It could be four subsquares and four frames each, so 32 faces in all to do into objfile, that's not bad considering, but what are the angles? Use excel? Yeah! A simple plot. The texture itself could be double or triple the resolution. But there's clipping to master somehow for non-square ponds. I guess that's the thing.

I want a basic projectile that releases particle glyphs on collision with a surface. It doesn't have to do damage. It would be great if the projectile could perform its dissipation of glyphs event on repeat of issuing control, say, left mouse click. That way you get to choose the distance of effect without needing to have any objects at that distance for the projectile to collide with. And perhaps a right mouse click has quite the opposite effect, it speeds it up to almost instantaneously collide with the end point of its trajectory. Yeah that would be cool, perhaps look at some of the gun mods, and dig up from the old fireball mod. Tough though.

It would be nice if rubble got the alteration that makes it retro falling and regenerating. 23:34pm

Maybe I'll do a collage of those 5 cool box shapes that share a long diagonal, so that'd be 6x5=30 faces. Have the long diagonal be vertical and scaled to unity. Have the dimensions be given below. Now THAT is a good 'ol project! It'd be best to have the dimensions always visible below but highlighted from the star shape. They are all integer multiples of a minimal.

10:41am 28/July I don't remember how I disabled flight even with commands in creative, but if I reinstall the whole thing it would go back to normal, though that is exactly what a kind of idiot would say to himself as he/she destroys uniqueness in a toy, that it should be 'normal'.

If I just make note of the changed files that bring the things I want into the game: the avatar of stax, clearly the already uploaded mods, world and deathformspec, something to do with the hand tool being strong enough to break rock...

Also I believe that in the same way that the fence and door are toggleable, a tool could be made someday to cut placed standard blocks. Like you point at a cube and the hud shows a spider diagram for how you might want to cut it. But it is fine now.

I was thinking of adding foliage/greenery to the dual brush/rocks so that maybe some simple single-pixel-squares hover above the greens, in purples and yellows and oranges and blues, and even jitter and jiggle a little. It would actually involve a remapping to a new vt texture that is an animated strip, where perhaps only the added color bit changes. There all possible locations of a pixel-petal are mapped to a unique subset of the vt-texture, whose location doesn't change through each still of the strip, but those regions would alternate from being textured to being blank. It means the mapping, to be intuitive, should be fairly direct, like a plan view, but of course the petals may even sit above each other and have askew angles. The point is that even if they are askew, remember their xy coordinates in the final rendering should correspond coherently to the alloted section of the vt-texture.

7:31am 1st August 2024 ... 8:19am blank16x128.png

- --Something he wanted to save
- --He broke down the door
- --And he broke down breaking down

7:06am 7th Aug A few plants, different but for immuteable quirks that come with

being here, that other than possibly being animated, transform into each other much like grass has its 5 odd stages, or the crops etc, but maybe a dozen or more in the cycle. Think carefully what family this might be.

Dually interpretted textures by projectiled wand might be possible. I mean by entering area. Then blocks could be given intermediate 'damaged' appearance before mining away to rubble. Or, 'foliaged'. For new blocks, editing is somewhat harder than creation, that's cause of junk.

11:57am made air climbable. Didn't work. Looking for hand tool reg so can reduce power of dig in... non creative... Gave stax sunglasses. He's officially free from all prisons of the mind. Let's hope he doesn't break anything. o\_0

13/Aug 21:22 Going to port build from old seed to another one of same alphanumeric prompt that won't have the 'flyingcarpet entity not defined' error redlines. ETA:1 hour. It involves saving a schem volume as a net to load below the origin and catch the avatar in short timings. 21:41 tidied notes into 3 text files in chronological order, labelled as such, each of around 70 kb storage, totalling about 550+850+450=1850lines, but that's including a lot of numbers from when I was doing the stones in. So anyway something in the world files activates the error message, a lingering datum or something left over from that time I tried to make magiccarpets work, around when Iwas dreaming of adding flying broomsticks you might be able to prop up against walls AND place longways on a table. 21:53 (-15,-8,-42 to 70,10,23) Affects 107844 nodes. Just better split it into four parts for surety. So it's 70-(-15)=70+15+1=86 in x dir and 23-(-42)=23+42+1=66 in z dir so chunks 43x33 each at pos1:{(-15,-42),(-15,-9),(28,-42),(28,-9)} and y is -8. Better make sure the new one works fine before deleting anything of course. 22:05 oh dear, looks like even 20 thousand is too many. Splitting into ninths then. We'll go to (71,10,23) and each length into thirds, so:  $\{(-15, -42), (-15, -20), (-15, 1), (13, -42), (13, -20), (13, 1), (42, -42$ 20), (42, 1)}

5:39am 14/8 Decided to grab right side but 30K crashed it. Sore throat. Running this the wrong way. Should be designing, not copying. Clearly it should just be copied procedurally, not in a gamified way. It's a nuisance. How and ever. It's not like 'look around the 'world' and grab what you want to save', it's 'Get everything, use grid'. And I'm waiting out the nights because I don'T feel like rushing this in the dark. Getting eager to build, maybe it's the waiting. The notion that Nininik was here.

6:05am  $\{(-15, -8, -14)\text{to}(-3, 7, 9)\}$  Bla 323nodes Neg z stcse

 $\{(-2, -8, -14) \text{ to}(12, 9, 9)\}$  Blb 601nodes plant staircase

 $\{(10, -8, 9) \text{ to}(22, 4, 23)\}$  Blc 274nodes Hedgar's ruins

All in a day's work, eh boy?

 $\{(13, -8, -14) \text{ to}(26, 10, 8)\}$  Bld 439nodes Captain's post.

 $\{(9, -8, -25)to(27, 10, -15)\}$  Ble 378nodes Outportal.

 $\{(28, -8, -42)\text{to}(70, 10, -19)\}\$ Blf 390nodes Blue and red highway.

 $\{(28, -8, -18) \text{ to}(50, 10, -3)\}$  Blg 306nodes Green highway.

That's it, they're at least gridded in.

6:48 using 14400 node block 100 deep five wide either way as safety net, drawn out of 'store' world. Call it 'j'. 7:02 singlenode ready with single node at origin. Should save this, might be useful if there's need for another reboot. 7:10 reload done, but without the guys: {Rillard, Isoma, Hedgar, Prinkle, Ranek, Yarej, Jearno, George} And it's back to the way it was before the carpets were crelessly tossed in.

24/08/24 18:32 after few days added koin. It spins. Want to get it to be absorbed by inventory on proximity to player. Perhaps something in either 'item drop' and 'cleaner' mods may be of use. There is a way to increase stack limit and it should be a straightforward exercise to find code that adds items to the stack. Furthermore it would do well to create a hud counter 'formspec' incorporating stack amount, for something as fundamental as collectible coins strewn about the world for survival mode (creative mode could have that the coins are placeable but if the selection box is successfully obsoleted by an absorbsion mechanic it may be acceptable to have them non-collectible thereafter, maybe not, probably not. But likely only placeable in creative mode,

at least). Think of the fun, the simple fun. Look at how a right click on item frames remove a highlighted item from itemstack. Find all the basic mentions of this mechanic and note the syntax. Do it as an officail study over a week, it's worth the time. Tomorrow's sunday. I'm real happy with the coin as it 'stands', rotating around any of the six signed coordinate axes, obliviously gold, with symbols 'I' and 'O' either face. The vertices were 384many, and they could have been less, like 168, but it was too complex for my tempestuous cradlings. I have a neat couple seconds of video showcasing the coins in three rotational axes with 'old stax' bearded and with sunglasses but I'm waiting for pemmy to come home so I can set that guitar riff that couldn't be persuaded to sound different to how it sounded when Iwas playing lying in bed, which is recorded now on her phone, and I'd rather just use her phone than record a new one. I don'T think it'll even fit, but I can shave it. Then I'll put up the model anyway so others can play with it even though there's important work to be done on making it like a retro collectible. It's real good though, real happy about it. Honest to god it's one of the best things to happen to the whole of minetest. 18:50. 11:26 27/8/24 Have to

- 1) try get stax to be only a 1 metre tall goblin so he can get into low tunnels
- 2) Make all demolitions of nodes take, compared coin collection, a long time.
- 3) beady door is a pair of archway covering beads that are all a single node, say the left one below the arch. Then the right one can be another arch-covering pair, like a door or something. Beady door acts like a curtain. That's for human-style developments. Obviously part of a grander set, probably fill 10th page. Not world-crucial yet.

Gotta find where player height was altered in 'minetest game'. Can mapgen schems in default/mapgen.lua, like bushes. Good read, I guess.

5:21am 31/Aug Read some of xdecor/mechanisms and default/doors/init.lua, just casually wondering also how runes might be toggled from not lit to lit, it would be a bit different to the way doors toggle, because with doors the obj file toggles using a clever symbol grab from the name: doors/init.lua 146: 'if node.name:sub(-2) == "\_b" then...' and I'll want that applied to the name of the pair of runes, which had been registered seperately. Come to think of it, combining them would free up enough space for another pair of nodes in 9 pages, even with koin. But of course Ihave to think: do doors come next? I thought of this challenge: choose boundary conditions for this little discrete case of a liquid model using sketches on paper. Use the fact that the nodes can be rotated in any direction to get something to work. It's very naive, I know, but this is a challenge in animation that fits the model world as a whole. For instance, if we had continuous deformation above a y=0.5 plane top, from (0.5,1,0.5) to (-0.5,1,-0.5) with no loss of volume so that when one corner is raised half a node in height, the other half is lowered, so it's really like 'Root 3 Split' (s\_3) of 'stones' deformed to standard node to the s\_3 again but facing the opposite direction, so that the (only) top plane ranges smoothly enough between the two extremes, they can be arranged so that their automatically synchronised movements convey a continuous surface expressing a choppy wave business. But this is only half the story. I want even more than this general co-operation of discretised surface wave-stitchings to have dual liquid-stone nodes like I did with 'Brushrock', and probably about the same amount, 15 or so I guess, so that pools don't have these squareness dilemmas in construction. 5:47 Another thing to read is the bit on ladders because Iwant to add them. I'll do a steel bars that poke out of concrete walls like I've seen, but I'll have that they are attached to each other on the other side of the vertical surface, inside the wall so to speak, so that they look like a regular structure if the ladder stands simply between a floor and another floor. Maybe two vertical bars a side. But then, they could be floating too.

13:30 3/9/24 Added collision box to match selection box for

'carts:register\_rail' function on line 217 of

games/minetest/games/minetest\_game/mods/carts/init.lua because stax keeps falling when walking the high porter pipeline. 13:34 not rendering the change. 13:42 actually, it's 'functions.lua'. 14:07 copied ladder's reg from xdecor to ladder.lua in tools folder. 15:14 designed or rather chose design of ladder obj as copper jutting with vertical pair of supports internal to mounted wall. 19:31 wall side of ladders have grids on two outer thirds and can't be climbed like the side facing its node position can, and it looks appropriately unclimbable.

15:12 4/9/24 Looking at list of node types. Not really thinking of breaking through the level here, just thinking of doing something, anything, like making grass not jumpeable-from, or making that you can't climb down something, or adding a bouncy mushroom, or that 'ke' rune, but it would be better with an entirely new look. Yeah baby. Like some sparkly stuff rising in spirals from the ground. with super bounce = 300 percent or something. On https://api.minetest.net/groups/. But it won't do, because those big rebounds cause fall damage.

cause fall damage. 16:00 6/9/24 Sloped 'brush'. Or maybe not. 16:16. 16:04 7/9/24 must set param type as same in switching rune nodes under new popper staff. 13:51 8/9 Popper at least seems to work fine now on this linux computer version of RSWO in minetest, with runes switching on/off on being activated by bubble blow from the old smokestaff popper. But the glitter appears at the origin each time the bubble hits, when it's supposed to be at the point of impact. It is a very surprising result. Also removing the differentials in the hit\_node section of po.lua is complicated by 'close squiggly bracket' errors. Also the particles are green, when there isn't even a green texture in the tool folder. Is it real magic? Dream on, it's probably something I did. 3:05am 10/9/24 I like to hold on to the screwdriver just in case. Reapplied the 8 names to the 8 standing mobs, still unchanged since. What a testament to their moral and judicial fibre, that they continue to perform at 100 percent efficiency their momentous challenges. Being there when I log on as flowingpoint. Doing what they do, whether it's contemplating the stars, making jokes, investigating missing objects, or just being ready to surprise me with a new development, it's great. It's like the old prophesy of the original 8 standing stones in that mappen that went mouldy real quick, the one with the map etched into the ground. A map of a dock city. A futuristic green port. I suppose you could simply look at the grass like it's water, and some insects would go for it that way too. There was an amphitheatre, huge ship tunnels above, skyscrapers for runes, and looking out from origin, the buildings got bigger and bigger, so that they took roughly the same solid angle in view. Made you think. Desperately profound. Frightening the meter of my old nightmare out of me. Remember? One night I watched an episode of Superman, where he falls through some wormhole in space-time and time travels back to limbo, it's a museum, and on one pedestal is a fist of stone he passes. Then that night I was laying in bed really confused about the fundamental existence of the meter. Is it real? Is it GOINGTOBEINTHEWAY? How far away do you want it? What's this thing you do with your eyes to IMAGINE distance? Traumatic. The universe was dangling on a string. An elastic band. So the eight standing stones became the eight characters and there are eight ways of having three runes on or off. And there are three runes: one in the basement (NO), some in the gardens (RETURN), and one at the water gate (MAY). I have to make it so that you can just flip arity of runes with pointed thing in runes.lua. Later. 3:23. Shared link on 'New Minecraft Movie Looks Bad' by penguinz. Then tried and failed to set up github account. Just don't feel like it. Would rather focus on equations now. Which is good. But aside from technical techniques, which seem to be all that drives around here, what's cool about counting? Cracks in the pavement gonna let you down. Is the space wheel powered by ten crystals? Are BIG numbers coming? (Like 1,2,3... but full node sized digits. And how?) Of course I'm just waiting for my hands to recover so I can write more exercises tomorrow. I'm studying stuff I touched while doing red. Not a big deal, I'm on the level for now. My ads are cheap, but it's what it is, an ad, not a life story. I was so satisfied with that 9 page result. The number, 9. If I keep writing like this it'll be the script for another episode of Sesame Street. 9 slots in the crafting table, and IHAVEto set it up so that a grid takes you to the pages rather than using the arrows alone because it would save that little extra bit of effort for the builder mode slam. I think, just go to wherever you were when changing the size of the buttons and add more and quickly shortcut them. It COULD even be that you simply click on the crafter and... nah, then you would want the both tabs as one. But it's more visual complexity. Well, I haven't even added crafting or started thinking about it yet, not in RSWO. Why not? Obviously this is part of my laid back approach to development. Don't do everything at once, and when you do something, really change it. Because the old game is gold, and the new game is me. Also, looks like stax is missing. Tried but didn't remember how to edit player image, but

just do quick search. Another thing is I have plenty of options where to go next with it, but it's no longer number one priority, and it's not for want of motivation, just my hand are tired by the waiting to 'type the right thing' and being given the damn error messages, I know it's a bit taboo, but yeah, I'm disgusted by the situation in general, total world failure most of the time because of some errant symbol. But of course one can align with the mentality that creators enjoy the concept that their detailed artifacts have the suggestion of permanence by informational integrity. Yeah, that's how you could feel about it, if you weren't doing it, but if you're doing it it's like your blood is like lava and slows and harden as you freeze with the program in the blinks before waking the world back to life, and for what? A little thing, an absurdity of intentionality that you wouldn't want anyone to think is actually important or the thing you normally get excited about. Then you get excited anyway because you spend more time with it, I never thought I'd be so happy about the number 9 in creative menu pages, or a glitter bubble staff... On that note, I wasn't sure about the name 'Popper' it just was there lexicographically, I should change it to some Abbreviated Portmanteau Identifier, or 'API', like, what it does is, it's a staff, the old smoke staff, one of the four, fire, earth, ice, and smoke, not counting thunder. And it used to shoot a pellet that when hitting something would have smoke emerge from it, now it shoots a bubble, like the Bzoom-a-scope, I guess they're related, at the same speed, and then golden sparkles dance about and if it was a rune the bubble hit it toggles, that is the rune that is already etched into the stone lights into its color (or fades again) (I wonder would I rather go with a proper indentation for those... hmm ETA:5 days, because that's what I'm imagining, angled surfaces, brand new look) and if it's the linux version it has the sparkles appear at the origin no matter wher the staff is which I didn't plan and even though I'm more skilled at coding now than I ever was, I kind of yearn for that old limit of not having an inkling how or even why Iwould want to change it back as anomolies go, since I'm only playing, there are other glitches far more devestating to change, everywhere else, like. I think it's a good staff. It doesn't do damage, but it demonstrates space with a free line. Just have to make distance limit for it so it pops before going to infinity, because it's kind of a taboo in space to shoot your load without a care for where it ends up, and even a casual toss of a little thing could rupture something big, but then, usually that's not an issue, just with a blank thing to start with, world like page, you notice, which come to think of it, ties in nicely as analogy for significance of errant symbols in code. I think coders, as a general rule, deserve to be given the proverbial podium of a writing session template, to pass time unwittingly in the deep trance of linguistic expression, because the earn it with the patience with machines, rarely shown to others in the light of day, but I know there's that clean underground, that darkness in which typing freely makes sense, like. But is it good stuff? Closer to goblins than god. We'll have to point at the horizon and meet there. I really hope that someone who watches penguinz's video tries their hand at my RSWO, which as it stands at the moment, good enough for me. Or who I was 10 or 20 years ago. Or maybe I just like the ring that has, and actually ... no, it's fine. It's a fine game. Let's keep praising it here, shall we? It's a game about designing structures. But it's not a game I can say I've played. This is actually not because I haven't played it (I have played it but not like it aught to be played by a typical person) but because I've played so many other games along the way here that it compresses expression to talk of it as something in the past, though that may be more balanced, it's unfair, it's a greater thing than a history I can capture, it's also part of what's happening now, everywhere in games, this screen and beyond it, the duality, the en-trance. There are liberties with expression in that safe-zone where you type things with no intention of saying them, though it might be nice to say, there's some doom in it, like maybe you need the script in an hour of darkness, or maybe you need the story to be the right way around some day, but still you're on the hot-plate of expression, pushing buttons for today and tomorrow, how could you not TRY to express yourself? This I am doing in the next math sessions on paper. I'm more relaxed, I hope that no one notices and something bad happens. It was generally good to stay alert for losses of skills: it was a skill to ask for completeness, something serious, but I guess I'm possibly affected by this recent success of a game, this bit I've done which Ishould really stop advertising because, I mean,

showing off the menu is rediculous, people are going to work with it, and the menu is the thing you're not supposed to see and be proud of as a builder or gamer it's the build itself and maybe the inventory of spoils and riches. What else? Number of coins, have to try add a very basic hud counter. On top of getting the coins to utomatically absorb. Don't wreck your head over it either. Because it's your hands that take the hit, wise up! And the hit comes from inaction, not so much over-action. Which is the trick to good personal development too, it's not shooting the bear, not throwing away your torches, not settling into a copypasta session or a spamalot mishap, or an account, and those are only where actions speak before words, words are exactly where you've no choice but to make habits, it's called grammar. And we avoid it. Because we're not talking to each other anymore, we're in our own worlds, but connected by choice, I mean, I don't mean that in a heavy way, actually I'm just dousing my flames of power with some kind of psycho-string theoretic parley-pom-pom positings, because I can, too. It's a priviledge, but I figure, like much else, work should be a good guide, work ethic, like, doing work a lot when I can remember to do it. Like the old days

but not nearly as noble, but sort of edging that way, with some restraint in order in terms of thinking too much for my own pleasure and getting into complainer mode when I think I know something. Then there's this foolish writing thought I would say, taking the shortcut of thinking fast with them, but letting them only become words, with some debt to the future to have to serve lest they be in vain, they're like promises, it's like I'm on some dirty road of freedom that we don't do alone and get away with. Words. On a screen. Won't get away with that. Anyway. Here you go, Liz. Talk soon!

--- 5:24am 9/4/25 Bit of route No.7 completed. I guess No.6 is next. Needs single page/scroll writing. Other languages even. Another non-physical: rotated graffiti, but chalk. Chalkify it. Also, i LIKE THE WAY ITEMS UNLINKED TO THE FLATO HOLDER FALL IF THE TUBESEG IS ORIENTED HOLLOW FACE DOWN, SO THAT THE ITEM FALLS. iT'S A CLASSIC MINIMAL INVENTORY. Electrical lightning strike animation for thunderstaff maybe, but that's just waffle stockpiling. Should be able to toggle those of the Knight's Leap Stairset (KLS32) which have partial volumetric closure on the external sides of the banisters to have it via some 16 additions in not in Cinventory, when doing models again. 9:32am Sore leg. Ready to start. 10:11 discerned orientations. checked, is righthanded after all for objs. 10:34am forked c812C.Say C for Co-Volume, the cover that completes the volume (at least on one side of the banister. this way there'll be compactness where one side of the staircase is walled in a strong sense, grid-like. updating selcols, and po for sto6.lua's clone nodereg. 10:43am done. nothing happened because I forgot to reference the mesh in reg and also to add the obj file to the models folder. 10:47am done, it appears, but still have to clone the selection box from the collision box, because I still see the nodebox lines on the model in render. 10:49am It was the positive Zs not the negatives to be blocked closed. 10:51 done proper, looks decent, of course, it could only aim to be exactly as expected, in fairness. Toggles with popper, obviously, and I suppose I should have a rubble version toggleable with rubler. 10:57 done. Great! 12:06pm c814C done. 12:30pm two more done, new angle, wondering about rubbled vol toggle, probably add later? Or now? 12:33 done. It's 'all the negative Xs up to zero' now. 12:48pm first c8laC done. 12:52pm made use of find and replace to streamline the now 4 dimensional set of 16 indices in popper add-ons. 13:02pm c8lbC done. 13:27pm c8ldC done, after adjusting faces with imprecise knowledge of the vertex identification maps, taking time to solve a good puzzle. 13:40pm switching the staffs is like streetball cool. 13:56 Said hi to guy from Barnados Street crew with sunglasses, because it IS a sunny day out, but Penny cut everything short, and the work goes on undiminished. 14:15 c8r4C done. Spaghet's coming! 14:31pm c8r6 and listening to HankG on synthetic species eduinfocornermebob. 14:35 can't say I'm 100% but I think it's important to be precise and respect the science nomenclature, the method, the knowledge, which so well is here. 15:11pm c8raC done. 15:12 Lunch, having Delicious Salmon Spaghetti and prob have to leave the rest for the day after it, will want to walk or something. 16:10pm suppose I'll look at the last three this sesh. Already done 13. 16:38 worked ahead po. 16:51 worked ahead sto6.

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16:59 c8rdC done. 17:08pm full set done.
                                                  if s.name ==
"stones:flat 0"
                    then
                                   p2f0a = s.param2
     minetest.env:set_node(p, {name="stones:flart_0",
param2=p2f0a}) end
                           if s.name == "stones:flart_0"
          p2f0b = s.param2
                                   minetest.env:set_node(p,
{name="stones:flat 0", param2=p2f0b}) end require calling
functions from other modfolders. 18:07 have rubler toggles not
effecting suspended items in flart/flat_O, want to have
rublification drops the item. Later, perhaps, other functions,
this is a hot piece of code. wasn't even neccessary:
local meta = minetest.env:get_meta(pos)
                                                       i f
meta:get_string("item") ~= "" then
                                                     if node.name
== "stones:flat_0" then
minetest.env:add_item({x=pos.x,y=pos.y,z=pos.z},
meta:get_string("item"))
                                           end
meta:set_string("item","")
                                      end in flart->flat
local meta = minetest.env:get_meta(pos)
                                                       i f
meta:get_string("item") ~= "" then
                                                     if node.name
== "stones:flat_0" or "stones:flart_0" then
minetest.env:add_item({x=pos.x,y=pos.y,z=pos.z},
meta:get_string("item"))
                                           end
meta:set_string("item","")
                                                  local objs =
                                      end
                    objs =
minetest.env:get_objects_inside_radius({x=pos.x,y=pos.y,z=pos.z},
.5)
                    if objs then
                                                  for _, obj in
ipairs(objs) do
                                        if obj and
obj:get_luaentity() and obj:get_luaentity().name == "stones:item"
then
                              obj:remove()
     end
                    end
                                 end in flat->flart of
rublification The ranger in 'remove' is temporary. 19:22 I'm
trying to remove the ghost object following drop from
rublification. There is a possibility of figuring out how to get
automatic respawning of the item after withdrawal, but later.
When an item-stocked flat_O is rublified, either it pops out to
roughly where the 'row' made contact (this can be math.floored in
the 'drop item' part of sus that's explicitly used in rubler
interaction list of po.lua) with no ghost if it's center face or
close to segment entrance and the item lies somewhat in contact
still with some horizontal part of the flat_O. Either that or it
drops away from it and the ghost remains, which is a niusance
because it's misleading in that it looks like an item is
available so the information is lost. 19:30 I've just checked and
where the item drops is independent of the ghost item's remaining
or not. 19:48 Want to use the simplicity of stones:flat_O reg's
'on_rightclick' function for 'row' during rublification. Dump:
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```
after 'if s.name == "stones:flat O" then' local meta =
minetest.env:get_meta(pos)
                                   if meta:get_string("item") ~=
"" then
                    if self.nodename == "stones:flat_0" or
"stones:flart_0" then
     minetest.env:add_item({x=math.floor(pos.x)
+0.5, y=math.floor(pos.y)+0.5, z=math.floor(pos.z)+0.5},
meta:get_string("item"))
                                   end
    meta:set_string("item","")
                                        end
                                                    local objs =
nil
            objs =
minetest.env:get_objects_inside_radius({x=pos.x,y=pos.y,z=pos.z},
           if objs then
                                    for _, obj in pairs(objs) do
if obj and obj:get_luaentity() and obj:get_luaentity().name ==
"stones:item" then
obj:set_properties({textures={"air"}})
     obj:remove()
                                  end
                                                  end
                                                               end
meta:set_string("item","") in po.lua under 'row' entity reg.
Similarly local meta = minetest.env:get_meta(pos)
meta:get_string("item") ~= "" then
                                             if self.nodename ==
"stones:flat_0" or "stones:flart_0" then
     minetest.env:add_item({x=pos.x,y=pos.y,z=pos.z},
meta:get_string("item"))
                                   end
    meta:set_string("item","")
                                                    local objs =
                                        end
            objs =
nil
minetest.env:get_objects_inside_radius({x=pos.x,y=pos.y,z=pos.z},
0.5)
             if objs then
                                      for _, obj in pairs(objs)
                   if obj and obj:get_luaentity() and
obj:get_luaentity().name == "stones:item" then
     obj:remove()
                                                  end
                                                               end
meta:set_string("item","") in stones:flart_O Back to the way it
was and there's no itemdrop, but now I'll simulate rightclick
with it instead and might have more luck with the ghost. the
confusion must be arising from the fact that the interaction
isn't securely localised at the static node as it would be if it
were an 'on_rightclick' application, it is an interaction between
a projectile entity and a static object, which has some kind of
ambiguity about the locations that are called at various parts of
the code I'm trying to use ot emulate a rightclick. drop_item,
update_item, remove_item are all functions of position and node.
Remove identifies the node and removes the entity within a
radius. If a ghost remains but an item doesn't, it must have
worked, but there's no concrete definition for a ghost item in
the standard code, so the question arises: what is the ghost and
how is it simulated on purpose? Update makes the metastring of
the node correspond with the visible texture of stones:item,
which I think is always there, either as the metastring, which
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derives from right-click interaction only thus far, and is otherwise 'air', ie: empty. Update begins with item removal but not changing the metastring, because 'remove' doesn't change the metastring, and therefore it is possible to use update to respawn the item. I have also noticed invisible item storage following increased range removal, with rightclick retrieval and timed reappearance, probably due to the abm, which 'updates' from the metastring. Then 'drop' is that the item pops out as can be picked and the metastring is cleared, as well as the entity is removed. Using these few clarifying definitions how would you classify a 'ghost'? It's an entity, but rightclick doesn't drop item and removes the entity. If the metastring is not empty, the abm will respawn it. In the cases where ghost appears, it's like 'drop' without the 'remove' part, that is, the metastring is cleared. 20:18 ghost appearance has also metastring clear, so 15second interval abm refreshing the item... pos is position of projectile impact, and that's also iffy, but it's generally somewhere around the target node, right? so drop uses 'minetest.env:add\_item( $\{x,y,z\}$ ,item) and the x,y,z there is the projectile 'row' wherever the hitnode is effected. This is why the drop happens at that point, it is noticeable. However, sometimes it is outside the node and falls away, which implies that the if statement in 'drop' is not satisfied when the drop occurs, so in that case self.nodename or node.name isn't flat\_o and must be air. Then why does a drop happen? 'row' has nonnegligible volume, cubic side length of 0.4. Clearly, if hitnode in 'row' is a function of the position of the entity, and whenever this is called there's no garuantee that it intersects the node that it supposedly impact, which is always used as the other argument in the function which makes it work to toggle them, it would be almost better if the pos argument of 'row' was made to be the position of the node argument, but I think that is set in places in the code, let me have a look. lose\_player should work to effect ranged annihilation of 'row', and otherwise an abm would work, as had been applied to 'pew'. Anyway I'll want an expression to extract the position of 's', the result of s =minetest.env:get\_node(self.object:getpos()) as written in hitnode. It seems to 'get the node' that is at the position of the entity object that hitnode is written for, and hitnode only applies once a node is at that position, so I would deduce that a node is designated to be at the position of the moving entity by wirtue of collision detection and not of intersection of its logged coordinates with the node's unit volume. I have clarified an if statement to have the full equality of the truth value written out each side of 'or' because I think when you have 'if

(expression) it is implied the question is of the truth of the statement rather than the more specific identification with the thing on the other side of the equality. Anyway, now the object just dissappears. Sorry, doesn't drop, and ghost problem is same, otherwise I'd consider it. But it means also that self.nodename isn't the self in question, which makes sense since it's an entity, not a node. what I want is s.name there. It's the way it was 20:58 now when it was taking 'if "stones:flart\_O"' as the full logical conditional. What could it mean? I have removed '

obj:remove()' from the 'remove' part of it, and in this case it leaves an 'air' stock texture that is visible as the thing that has 'air' written on it, but the ghost problem is the same with a semblance of the item removed. Is 'meta' a property that can be initialised alongside param2 in the original rublification toggle placement, the 'setnode'? Actually I want to keep the item there, that's all, or maybe have it come out for flat to flart, but not on the repair. So what's the simplest way to do that? 21:12 21:27 just... made a mess... spawning 'air' textures, ang an 'always ghost' on repair. That's because I'm just copying the remove part of update, I don't have to. 21:29 removed it and it behaves the same. I'll try an abm to have if metastring is empty to remove the object, the entity, the stones:item hopefully, then we'd have 'drop'. I wonder if an abm could by chance apply during an intermediate step in one of the other functions, or is it always designated its own time, I suppose it would be. Should have that if it doesn;t have an object, then update the metastring ot air...? What causes the ghost again? 21:41 I see my new abm at work, producing by itself an 'air' texture in the flat\_o. now just to set it so that it does this for ghost, and have the texture be invisible. I'll go with... hmmm. it keeps spawning air textures because the abm was to do that if the metastring was empty, in which case air is read the same as empty. It forms a dense cylinder, blue, over time, kinda neat, like canisters absorbing oxygen into a tank or whatnot... It's still 'empty'. It doesn't replace 'ghost, but adds more 'air', so I want to change the abm to make it instead remove whatever's there being visible. Hmmm... 'remove\_entity isn't in the minetest.env reportoire... But at least it adds the entity of 'air' dead centre of the node, because the abm applies directly to nodes. 21:58 so I threw in 'remove' into the abm and it worked! took obj:set\_properties({textures={"air"}}) out of the abm, but left the rest in. Only thing is the items, when they are in the tube, blink out and back after a second or two with the same frequency as the abm. Well best I can do is there'll be a ghost for a few seconds after rublification or

repair, but the abm clears it. And sometimes, there's no ghost! 22:13pm